

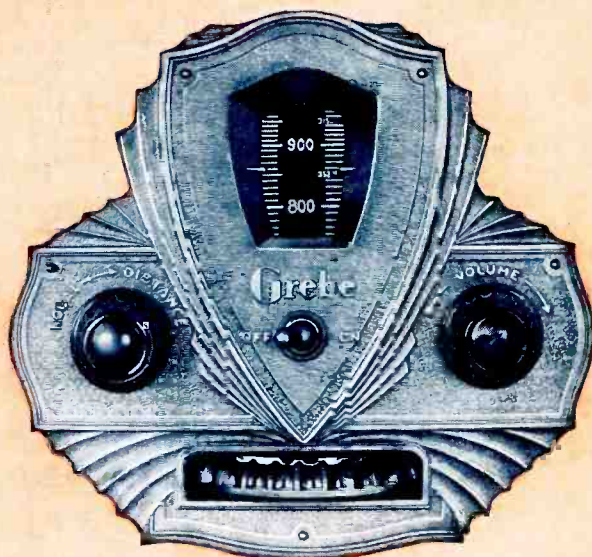
STATISTICS AND SPECIFICATIONS NUMBER

Radio Retailing

The Business Magazine of the Radio Industry

A McGraw-Hill Publication

MARCH, 1930



A. H. GREBE & COMPANY, INC.

RICHMOND HILL, NEW YORK

Western Branch, 443 South San Pedro Street, Los Angeles, California
New York Sales Office, Grebe Sales Company, 113 West 57th Street

Grebe radio

SUPER-SYNCHROPHASE 

MAKERS OF FINE PRECISION RADIO INSTRUMENTS SINCE 1909

Riddle!

When is it easier to sell a \$249 set to a radio prospect than a cheap set . . . and incidentally to make a longer profit?

Answer!

When the set you offer is a **BRUNSWICK COMBINATION** . . . (Panatrope with Radio —Model S-31)

Easier—because you immediately lift your sale out of a fiercely competitive field . . . into a highly selective field, where superiority is quickly recognized . . .

Easier—because you offer a **plus value** every music lover wants—at an increase in price astonishingly small . . .

Easier—because you are able to offer a high trade-in concession for an old radio set or phonograph and still assure yourself a splendid profit.



—and how your profit from the sale of a Brunswick Combination grows and **grows** and **GROWS**—each month—each year—as a result of the steady and endless sale of Brunswick electrically recorded records! Find out today how you can participate in this highly profitable business.

Brunswick

RADIO . . . PANATROPE WITH RADIO . . . RECORDS

THE BRUNSWICK-BALKE-COLLENDER CO., Chicago, New York, Toronto — Branches in All Principal Cities

Next Month
Our
VITAL ISSUES
Number

THE Radio Industry is facing many serious problems. Next month, therefore, *Radio Retailing* will devote much of its space to a discussion and clarification of many of these vital issues. Nationally known authorities will cover the following subjects:

MANUFACTURER-DEALER ADVERTISING
CO-OPERATION

WHAT should be the policy of the radio set manufacturer toward assisting jobbers and dealers in their local advertising efforts? Eventually a more or less universal policy must be formulated. *Radio Retailing* has collected a wealth of opinion on this matter. These conflicting viewpoints will be analyzed and reconciled by Roland Cole, formerly on the editorial staff of *Printer's Ink* and one of the leading authorities on advertising practices in the United States.

CHAIN STORE AND "DUMPING"
COMPETITION

ALL is not well with the mushroom growth of the chain store plan. The present status of the chain store and ways in which the independent dealer can meet competition will be discussed by our old friend, S. J. Ryan. He will present, furthermore, a plan which would put the independent radio merchant in a position to profit by the dumping of distress merchandise.

THE QUOTA SYSTEM

SHOULD manufacturers', jobbers' and dealers' quotas be fixed or flexible? If flexible, to what extent? O. Fred Rost, a former radio and electrical jobber of outstanding achievement, will give us some very constructive views on this problem.

THEN there will be such subjects as the market for automatic phonographs, side lines to handle this summer, the home demonstration hurdle, and some further aspects of the patent rights question.

Each of these pertinent themes will be handled in an intelligent, constructive and fair manner.

Watch for our "Vital Issues" Number.

Radio Retailing

The Business Magazine of the Radio Industry

O. H. CALDWELL, Editor

RAY V. SUTLIFFE,
Managing Editor
HENRY W. BAUKAT,
Associate Editor
S. J. RYAN,
Merchandising Counsellor
M. E. HERRING,
Publishing Director

March
1930

Vol. II—No. 3

HARRY PHILLIPS,
Art Director
T. H. PURINTON,
Assistant Editor
C. GRUNSKY,
San Francisco
P. WOOTON, Washington

CONTENTS

Copyright, 1930, by McGraw-Hill Publishing Company, Inc.

"DUMPING" CRISIS PAST	17
Editorial. <i>By Ray V. Sutcliffe</i>	
IT'S A SALE, NOT A DEMONSTRATION	18
Home demonstrations are unnecessary and unprofitable. <i>By Henry W. Baukat</i>	
KNOW THESE FACTS ABOUT RADIO'S STARS	20
Getting acquainted with artists that help you sell radio.	
LOOK UP!	22
New NFRA president's message to the trade.	
"AN OUNCE OF PREVENTION—"	23
Some of the best thinking of the Cleveland Convention.	
SPECIFICATIONS OF RADIO SETS AND COMBINATIONS	24
Manufacturing lines until after the Trade Show.	
THE GREAT MARTIN MYSTERY	30
It's the little things that drive great men to desperation. <i>By Alan Streeter</i>	
FRANK FACTS FROM A BANKER	32
More about time paper financing.	
YOU, TOO, CAN SELL FINE FURNITURE	34
Quality furniture has a definite place in present day radio sales. <i>By Thelma H. Purinton</i>	
HE WENT AFTER A SCHOOL INSTALLATION—AND GOT IT ...	36
There's money in education—read how to get it.	
SCREEN GRID, PHONOGRAPH PICK UP PROBLEMS	38
Solving some of the circuit intricacies involved.	
READ IT!	40
Proper knowledge of law is an asset to any business. <i>By Leslie Childs</i>	
FINAL 1929 FIGURES AND 1930 FORECAST	41
Completion of statistics begun in January issue.	
GET THE CREDIT FACTS	44
Lower your risk and increase your net.	
THE COST OF HOME DEMONSTRATIONS	45
Survey shows present plan uneconomical.	

Departments

Sales Ideas	42
Editorials	46
New Merchandise	48
News of the Industry	52

McGRAW-HILL PUBLISHING COMPANY, INC., Tenth Ave. at 36th St., New York, N. Y.

JAMES H. MCGRAW, Chairman of the Board
MALCOLM MUIR, President
JAMES H. MCGRAW, JR., Vice-Pres. and Treas.
EDWARD J. MEHREN, Vice-President

MASON BRITTON, Vice-President
EDGAR KOBAK, Vice-President
HAROLD W. MCGRAW, Vice-President
H. C. PARMELEN, Editorial Director
C. H. THOMPSON, Secretary

Cable Address: "Machinist, N. Y."
NEW YORK District Office, 285 Madison Ave.
WASHINGTON, National Press Building
CHICAGO, 520 North Michigan Ave.
PHILADELPHIA, 1600 Arch Street
CLEVELAND, Guardian Building
ST. LOUIS, Bell Telephone Building

SAN FRANCISCO, 883 Mission Street
BOSTON, 1427 Statler Bldg.
GREENVILLE, S. C., 1391 Woodside Bldg.
DETROIT, 2-257 General Motors Bldg.
LOS ANGELES, 632 Chamber of Com. Bldg.
LONDON, 6 Boulevard St., London, E. C. 4

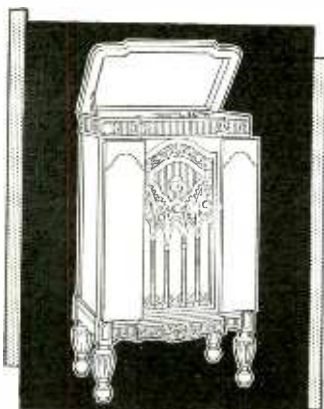
Member A.B.P. Member A.B.C. Printed in U.S.A.



Stromberg-Carlson Dealers know the Importance of the *Telephone Background*

Listen Monday Evenings to the Coast-to-Coast Broadcast of the Stromberg-Carlson Orchestra over the National Broadcasting Company's Blue Network and Associated Stations.

No. 654 Stromberg-Carlson. Radio-Phonograph. Plays records with Stromberg-Carlson radio tone. Triple Screen Grid. Price, less tubes, East of Rockies . . . \$369



IN 1894 Stromberg-Carlson produced one of its first instruments for the transmission and reception of sound—a magneto type desk telephone.

At about the same time Marconi was successfully conducting his experiments with wireless telegraphy—a means of communication which was later developed by telephone laboratories to the efficient present day radio.

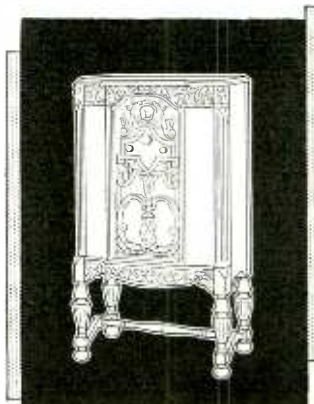
During these years Stromberg-Carlson not only has produced telephone equipment which is unexcelled throughout the world—but also has played an important part in setting standards of excellence in radio.

Since entering the radio field in 1915 with a headset; in 1925 with the first "totally shielded" receiver; and in 1930 with advanced screen grid receivers—every radio product has justified the slogan "There is nothing finer than a Stromberg-Carlson." Write for details of the complete Stromberg-Carlson line.

STROMBERG-CARLSON TELEPHONE MFG. CO.
ROCHESTER, N. Y.

No. 846 Stromberg-Carlson. (Shown at top) Art Console. Employs 10 Tubes. Triple Screen Grid in radio frequency. Automatic Volume Control. Visual Tuning Meter. Price, less tubes, East of Rockies . . . \$347.50

No. 652 Stromberg-Carlson. Low Console. Triple Screen Grid in radio frequency. Extra-size Electro-Dynamic Speaker. Price, less tubes, East of Rockies \$239



Stromberg-Carlson

MAKERS OF VOICE TRANSMISSION AND VOICE RECEPTION APPARATUS FOR MORE THAN THIRTY-FIVE YEARS

To the ...

1400 DEALERS

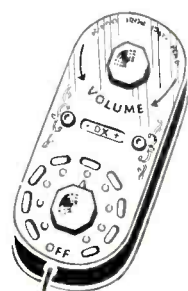
who have written us about

UTAH

Remote Control

We answer:

You will soon be able to secure
it on several standard sets.



UTAH RADIO PRODUCTS CO., 1737 S. Michigan Ave., Chicago

KIEL

GOLDEN VOICED TABLE

For the Atwater Kent Radio



PATENTS APPLIED FOR

Month after month it sells — Sells — SELLS

The Kiel Golden Voiced Table with Atwater Kent Screen-Grid Radio has earned an unprecedented reputation for fast, profitable, non-stop sales . . . Month after month it has proved its right to the title of continuous sales producer . . . And supply is keeping pace with the sensational demand. Kiel's great plants are working steadily. There is not a single delay from factory to distributor to

you. *Every Atwater Kent dealer can get immediate delivery . . .* Your distributor can supply the Kiel Golden Voiced Table, in quantities, the minute your stock runs low. And he will be glad to furnish you with a complete supply of newspaper mats, display cards and descriptive folders . . . Phone or wire your order for KI-99 to your Atwater Kent distributor today.

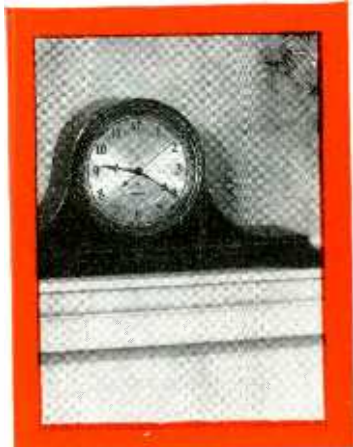
THE KIEL FURNITURE COMPANY, Milwaukee, Wis.



THE RAVENSWOOD is small, neat, compact and, of course, a perfect timekeeper. Bakelite case, 7 inches high, dial 3 1/8 inches diameter. Complete, ready to be plugged in the \$9⁷⁵ light socket . .



COLONIAL..... \$14.50



CAMBRIDGE\$32.50



KITCHEN MODEL....\$9.75



GOthic.....\$29.50

New Profits for the Radio Dealer

THERE are no springs, no regular clock works in the synchronous electric clock. You, as a radio dealer, are a logical merchandiser of Hammond Electric Clocks for that reason. There is no servicing, or installation attached to this new type of clock — they are shelf merchandise and very desirable. Everyone coming into your store needs a clock that gives exact time. People like the idea of not having to wind or even regulate the home clock. Get your share of this new business while the market is expanding. The better electrical jobbers can supply you with Hammond Clocks. Use the coupon below for full information and the name of the nearest jobber.

Hammond Synchronous Clocks are manufactured under Hammond Patent No. 1,719,805 and applications. Infringers will be prosecuted.



WALL MODEL...\$22.50

The Hammond Clock Company (RR 2)
 4115 Ravenswood Ave., Chicago, Ill.
 Gentlemen: Send me complete information.

Name _____
 Address _____
 City and State _____



The EAR OF THE AIR

IT'S **NEW**



IT STICKS TO ANYTHING! ANYWHERE

Stiktape is sold only through recognized jobbers and is packed in individual tin containers. Twelve containers in a beautiful dealer display carton. One colored window strip in each dealer carton. Twelve cartons to standard distributors case. Suggested dealer discount forty per cent from \$1.00 list. Jobbers write for special discount.

MADE of a new alloy of great capacity, Stiktape is non-corrosive and very sensitive to broadcast reception.

Coated with adhesive rubber, it will stick to anything.

There is nothing tricky or mysterious about this aerial.

It is just a good straight line conductor of great capacity, equivalent to approximately four strands of No. 14 copper wires in parallel.

It can be easily and quickly installed in any home, apartment or hotel.

To install, hook the clip under or through aerial binding post, unroll tape, sticking in place.

It can be hidden from view, if desired, behind picture molding, baseboard, or under carpet or rug, without loss of efficiency.

Reduces service troubles to a minimum.

Dealers! Send check or money order for \$7.20 and we will ship you one full dealer display carton as illustrated, containing 12 com-

plete aerials. Your money will be refunded if you are not completely satisfied. All orders will be credited to your local jobber.



Sampson Industries, Inc.
9 Rutger St., St. Louis, Mo.

Order for \$..... for which
Enclosed find check or P. O. Money Order for \$.....
STIKTAPE AERIALS.

SAMPSON INDUSTRIES, INC.
9 Rutger St., St. Louis, Mo.

Name.....
Address.....
Name and address of local jobber.....

UNITED STATES
APEX UNIFIED RADIO

SCREEN GRID, OF COURSE,
BY PUBLIC DEMAND

Retail
Price

\$101



complete
with
tubes

The *new* **1930 RADIO SENSATION!**

HERE is a money-maker for you! Here is the radio set you've been waiting for! It has everything—everything you can expect of sets that retail for far more than the list price of the new 1930 United States Apex! And when you can say to your customer "Here's a set that retails for \$101—everything complete"—you've made a sale!

It's ready—the radio sensation of the year! U. S. Radio has solved the problem of a new set—a greater set—at a lower price, complete with tubes! Not a cut price on old merchandise, but new precision radios at a popular price on new improved modern standards.

It has long been recognized that trends in the radio industry were toward a complete set—a set ready to install, with nothing more to buy. But it remained for United States Radio and Television to bring out this smashing new piece of

merchandise—an up-to-date, *brand new* set—seven tube super-screen-grid model, in a beautiful new cabinet, *complete with tubes*, to sell at \$101!

Other Apex Models

Console Model 11—8-Tube Super-Screen-Grid. \$130 complete with tubes.

Console Model 14—8-Tube Super-Screen-Grid. \$155 complete with tubes.

Battery Console Model 54—5-Tube Super-Screen-Grid. \$95 complete with tubes.

Battery Table Model 55—5-Tube Super-Screen-Grid. \$58 complete with tubes.

Study these Features:

the famous United States Apex Super - Screen - Grid chassis, with seven tubes. The United States Apex Multi-Phase Circuit—goal of radio engineers for years. The new United States Apex Full Tone-Color Electro-Dynamic Speaker—the speaker that has given new conceptions of tone fidelity. And a cabinet equaled in few sets that sell for twice the price of the new 1930 United States Apex!

Apex dealers everywhere are making money. Will you let some one else get the profits that logically belong to you? Write, wire, or telephone the distributor in your city for details of the United States Apex franchise!

UNITED STATES RADIO AND TELEVISION CORPORATION · *Factory:* Marion, Indiana

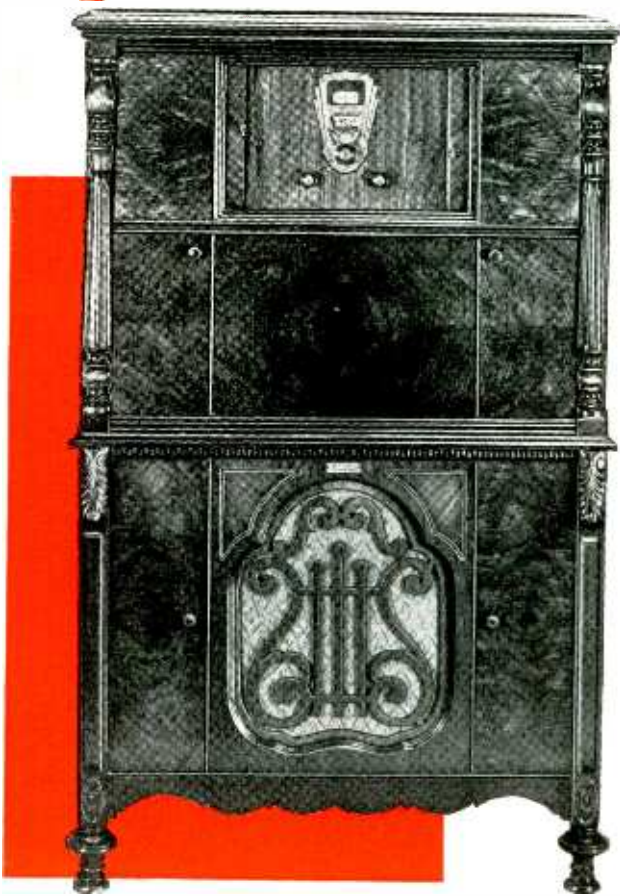
United States

APEX

UNIFIED Radio

RADIO HOST FROM COAST TO COAST

Capehart Announces



The AMPERION

A new line of models, just announced, at new low prices. Plays 10 to 18 standard records on both sides—20 to 36 selections—turning and changing the records automatically and continuously without attention.

Superb tone, adjustable in volume to any requirement. Electrical amplification. Electro-Dynamic Speaker. Magnificent cabinets of superior design and craftsmanship.

COMMERCIAL MODELS

Choice of models for public establishments, large halls and auditoriums. *With or without coin operated attachments.* With or without RADIO in combination.

HOME MODELS

Choice of models with or without Radio combination, housed in exquisite cabinets of fine woods.



The ORCHESTROPE

The De Luxe Capehart line. Plays 28 standard records on both sides—56 selections—turning and changing the records automatically and continuously without attention.

Three stages of electric amplification and an Electro-Dynamic Speaker produce the famous Capehart Tone. Superb cabinets of finest design and workmanship.

COMMERCIAL MODELS

Choice of models for every indoor or outdoor requirement. *With or without coin operated attachment.*

HOME MODELS

Cabinets of modern design, costly woods and very finest craftsmanship.



Orchestrape for the Home—a triumph of cabinet work



Amperion Club Model continuous playing phonograph



Amperion combination Radio and Phonograph, for commercial use



Orchestrape Auditorium Model for large halls



Auxiliary Speaker, Console style for use with all Capeharts

the AMPERION

—a Companion Line to the ORCHESTROPE at

NEW LOW PRICES

THE instrument you have been waiting for is here —the Amperion by Capehart, a new companion line to the Orchestrope, which sweeps away price resistance in the automatic phonograph field.

BIGGER PROFITS *than ever*
in AUTOMATIC MUSIC

The Capehart Amperion line opens up a tremendous, untouched market. Capehart dealers, handling the Orchestrope alone, have been piling up profits of \$2,000 to \$11,000 a month. Now, with the Amperion in addition at new low prices, opportunities for profits are *many times as great*.

A Model for Every Price and Purpose

The Capehart line—Orchestrope and Amperion—now fulfills at the right price, every conceivable demand for automatic music. The small shop, the magnificent hotel, the intimate restaurant, the large amusement hall, the outdoor park, or the luxurious home—for any of these—the Capehart dealer will have a model to suit the purse and purpose exactly.

Big 1930 Advertising Campaign

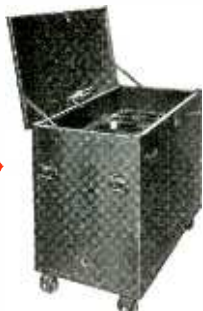
The biggest national advertising campaign ever attempted in the automatic phonograph field will announce the Capehart line to the public this year. Advertisements in the Saturday Evening Post, Colliers, House Beautiful and other home mediums; in restaurant, hotel and other commercial papers. A direct mail campaign to hundreds of thousands of prospects. Selling helps for dealers—a liberal Finance Plan—everything to make a most complete advertising, merchandising and selling plan for Capehart dealers.

Capehart

AMPERION-ORCHESTROPE



Amperion Club Model
with combination Radio
and Phonograph



Orchestrope Park Model
for outdoor use



Double Unit Park
Speaker for outdoor
installations

**PLAYS RECORDS
CONTINUOUSLY**
*on Both Sides
Without Attention*

A complete line of Automatic Phonographs such as has never been available to the public before. Without a doubt, the Capehart Franchise offers to dealers the most sensational proposition in the music field today.

Mail Coupon or Wire

With the introduction of the Amperion line, Capehart is extending its dealer organization to serve a greatly increased market. New dealers are wanted who can measure up to the splendid possibilities of this line. No wide awake dealer should fail to post himself now on what the Capehart Franchise will mean in his territory. We have prepared a complete portfolio which tells the full story, including actual records of dealers and users and full descriptions of Capehart models. Send the coupon—or, better still, *wire* at once for your copy. Please act without delay before the valuable Capehart franchise in your territory has been awarded.

The Capehart Corporation
Dept 4853, Fort Wayne, Ind.



The Capehart Corporation
Dept 4853, Fort Wayne, Ind.

Please send, without obligation, your dealer's portfolio telling full details of the Capehart Dealer's Franchise and descriptions of the full Capehart line.

Name _____

Address _____

City _____

State _____

“**I** SENT our engineers
 from coast to coast and made them
 prove their amazing claims”

THEY took Model 589 into twenty states. They tested it in hotel rooms and in university laboratories, in city apartments and suburban bungalows, in Northern Canada, in Maine and in California. They placed it side by side with every well known radio made.

So NOW, when we say that the New Sparton sets a new high mark of radio value and performance we mean just that, because we KNOW that we are offering one of the most remarkable distance-getters ever built. We know that its ability to cut through high-powered local stations to far away outside points has amazed radio experts from coast to coast. We know that Radio's Richest Voice and FACE-TO-FACE REALISM have been preserved with all their thrilling beauty. This remarkable model is the lowest priced console Sparton ever made.

THE SPARKS-WITHINGTON COMPANY
 (Established 1900)

JACKSON, MICHIGAN, U. S. A.

Pioneers of Electric Radio without batteries of any kind



W. D. Parks

President—General Mgr.
 The Sparks-Withington Co.



The NEW SPARTON
 10-TUBE Model 589

THE *New* SPARTON
 “Radio's Richest Voice”

(430)

HOW MANY TUBE LINES HAVE YOU CARRIED During the past five years?

The Perryman jobbers of 1925 are Perryman jobbers of 1930.

Since the inception of our business we have removed just three names from our jobber list—two because of financial difficulties and one voluntary dissolution.

No jobber has ever divorced us because of alleged bad merchandise, unsatisfactory replacement, unfair trade practices, or lack of cooperation from our Sales, Engineering or Financial Departments.

Perryman has achieved this unusual and outstanding position because our executive personnel has a sympathetic and unselfish understanding of the jobbers' problems; because we help our jobbers to solve those problems.

Measure our desirability as your partner in the tube business by the yardstick of our "past performances." These "past performances" are far more tangible, far more definite than "promises" as a means for you to judge the value of a Perryman franchise to you.

PERRYMAN ELECTRIC CO., INC.
4901 Hudson Blvd., North Bergen, N. J.

PERRYMAN

RADIO



TUBES

YOUR CUSTOMERS CAN HEAR THE DIFFERENCE AND SEE THE REASON « «

4-PILLAR CONSTRUCTION MAKES EVEREADY RAYTHEONS DIFFERENT—STRONGER—BETTER!

THE one thing that *all* your customers are interested in is how to get better reception from their radio sets. Now you can sell them better reception—the *best that's possible*—with Eveready Raytheon 4-Pillar Tubes. They're a new, revolutionary improvement! . . . Eveready Raytheons give better reception because of their exclusive, patented *4-Pillar construction*. Look at the diagram on this page. Notice the solid, four-cornered glass stem, with four sturdy pillars imbedded in it. See how these pillars hold the elements at both sides as well as at the ends. In no other tube are the elements braced so rigidly and strongly. . . . This means that Eveready Raytheons are immune to the jolts of shipment and handling which endanger the performance of ordinary tubes. In each Eveready Raytheon, the fragile elements are permanently anchored in their most sensitive position! . . . *Tell your customers to renew all their tubes with Eveready Raytheons at regular intervals . . .* and their reception will always be clear, full-voiced, and breath-taking in its realism. . . . These tubes are built by the makers of the famous Eveready Layerbilt "B" Batteries—another radical radio improvement. Eveready Raytheons come in all types, and fit every standard A. C. and battery-operated receiver now in use. They are selling fast through a selected number of jobbers, conveniently located. Ask your jobber, or write us now for the names of jobbers near you.

NATIONAL CARBON COMPANY, Inc. *General Offices:* New York, N. Y.

Branches: Chicago Kansas City New York San Francisco

Unit of Union Carbide and Carbon Corporation

EVEREADY RAYTHEON ER 227

EVEREADY RAYTHEON

EVEREADY RAYTHEON ER 224

LONG LIFE RADIO TUBE

NATIONAL CARBON COMPANY, INC.

4-PILLAR TUBES



. . . not an isolated section of the country



. . . but the whole world comes in with amazing clarity on

THE NEW **LEUTZ**
SHORT WAVE RECEIVER

*Engineered and built only for short waves
not an adapted set*

Now there is no need for your customers to wait for foreign programs to be rebroadcast. Let them hear the program direct, via short waves!

This new set is built *only* for short wave work. It is so selective and so sensitive that it sets an entirely new standard in distant reception. New and original features are included which overcome the early

difficulties encountered in such work. It is reliable and easy to operate.

Get a running start on this fascinating new field with the standard short-wave set—

LEUTZ

Descriptive literature gives the complete details of this amazing set. Write now for information.

C. R. LEUTZ, INCORPORATED

ALTOONA, PA., U. S. A.

Cables: Experinfo, N. Y.

WEST COAST
B. J. Howdershell
Detwiler Bldg., 412 West Sixth St.,
Los Angeles, California

NEW YORK
112 West 42nd St., New York, N. Y.

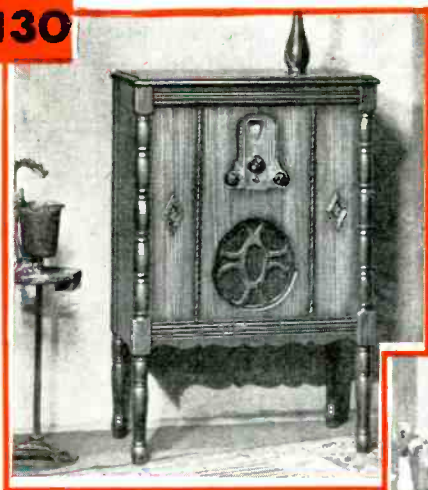
FRANCE
Baldwin M. Baldwin
Boulevard Haussman, Paris, France
Cables: Experinfo, Paris

The news

HERE THEY

STEWART-

\$130



Tremont Colonial Model in American Walnut.

At Right Oxford Hepplewhite DeLuxe Highboy with Sliding Doors. American Walnut, with Australian Lacewood Panelling.

\$140



Woodstock, Early English, American Walnut, beautifully panelled in Hard Maple.

\$150



All prices less tubes—Western prices slightly higher

STEWART-

WARNER

is out!!!

ARE . . .

WARNER'S

New 1930 Models

**New Radio Refinements! New Cabinet Beauty!
New Low Prices!**

Here's the big money-making Stewart-Warner program for 1930. Read these facts.

The new models are Tremont Colonial, Woodstock Early English, and Oxford Hepplewhite.

With these, plus the fast selling 17th century model, priced at \$157.50, that is still sweeping the country, you can suit every prospect with a cabinet to match his home furnishings.

Capitalize on the demand for style in Radio merchandise by featuring the Stewart-Warner. Feature also the remarkable sensitivity of the Stewart-Warner—the only set to give you uniform reception clear across the dial.

Feature the Punch in Stewart-Warner performance—the punch that brings the distant stations booming in

like locals, the punch that gives the pep and power with unmatched realism of tone and without A. C. hum.

Get the facts now on the Stewart-Warner proposition for 1930. \$50,000,000 and 24 years' experience in precision manufacture plus the good will of 27 million customers stand behind your Stewart-Warner franchise. The new 1930 franchises are ready. Get your application in—NOW—for your territory.

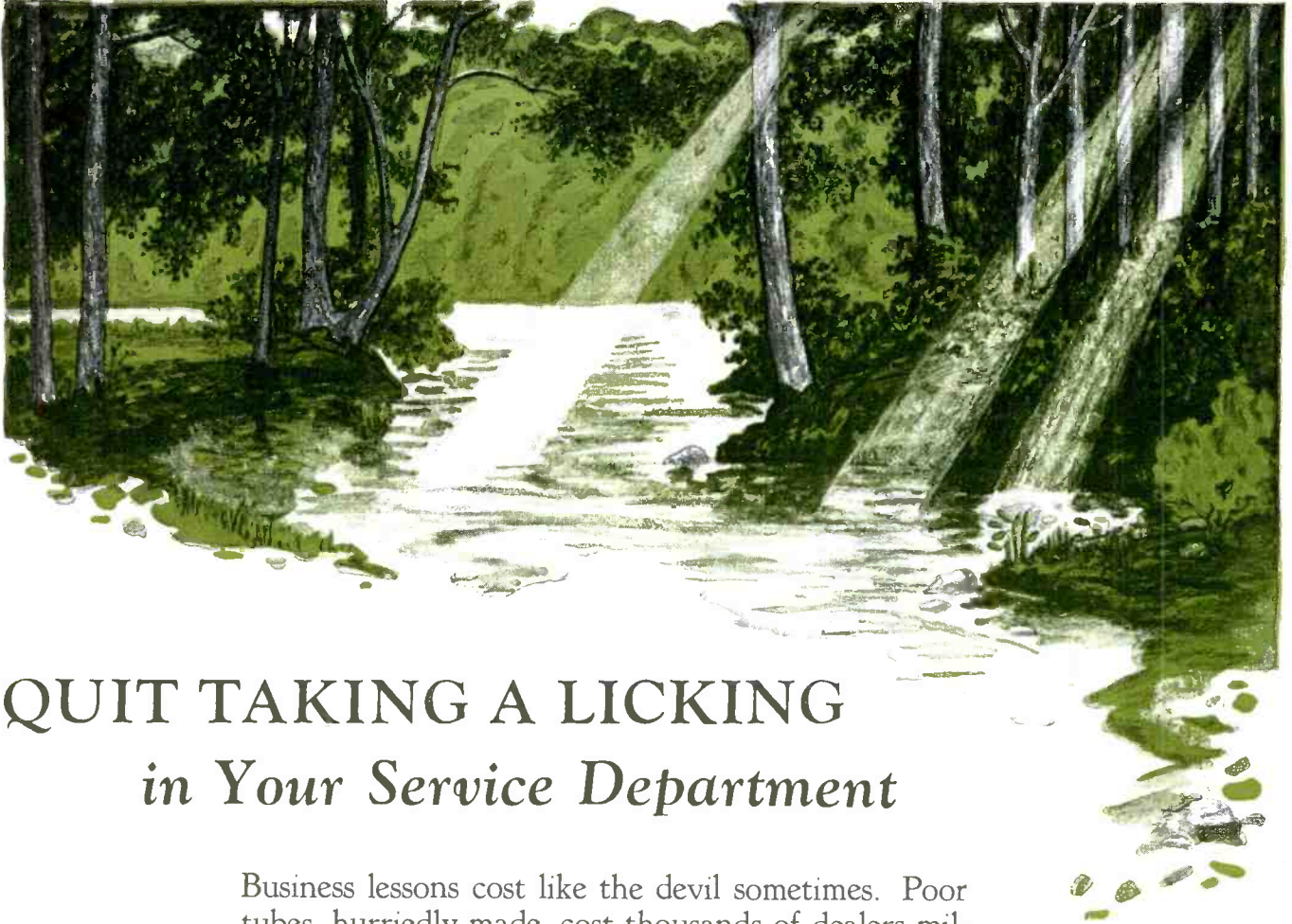
A 50-WORD STORY

Why the Stewart-Warner is Selling

Has improved Screen Grid Circuit 8 tubes, uniform reception clear across the dial. Three times greater volume without distortion or A. C. hum. Rated highest for sensitive reception by engineers. New electrodynamic Reproducer. Unmatched realism of tone. Plug-in for phonograph. Beautiful period models. Every up-to-the-minute improvement.

Screen Grid RADIOS

"The Set With the PUNCH"



QUIT TAKING A LICKING in Your Service Department

Business lessons cost like the devil sometimes. Poor tubes, hurriedly made, cost thousands of dealers millions of dollars in 1929.

What'll you do *this* year? Will you take a licking on tubes "at a price", or equip with tubes you *can* trust?

No "special deals" in Sylvania Tubes, whether you're big or little. But their use in the sets you sell brings relief to your service department and permanence to your profits.

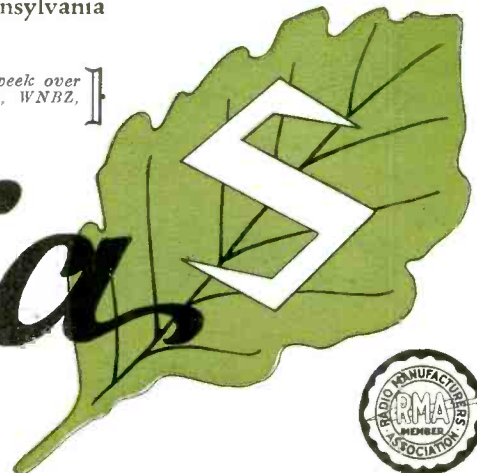
SYLVANIA PRODUCTS COMPANY
Emporium Pennsylvania

*[The home of the Sylvania Foresters who are heard each week over
WJZ, KDKA, KWK, KYW, WBZ, WEZA, WHAM, WREN, WNBZ,
KFAB, WGY.]*

Sylvania

RADIO TUBES

Licensed Under RCA Patents



MARCH, 1930

Radio Retailing

The Business Magazine of the Radio Industry

O. H. CALDWELL,
Editor

A MCGRAW-HILL PUBLICATION. ESTABLISHED 1925



“DUMPING”

Crisis Past

“DUMPING,” as a menace to the sale of standard radio merchandise, no longer need be feared this season. This good news is based on a careful check-up, just concluded, of all likely sources of “distress” receiving sets.

Despite the dual circumstance of over-production and of the closing out of certain manufactured stocks, approximately seventy per cent of all well known sets available for the consumer from these sources already has been absorbed. There remains, furthermore, only three real danger spots to be reckoned with—and in these instances stocks are in the hands of men who plan to distribute them in a manner which will cause a minimum upsetting of established values. The aggregate amount of this merchandise, moreover, does not exceed 90,000 units, or but two per cent of our 1930 estimated market.

CONCRETE evidence of this cheering state of affairs is offered by telegrams from set manufacturers, reputed to have over-produced, which affirm that their factory surplus is now a negligible quantity.

A well-known concern specializing in distress merchandise mirrors the sentiment of other traders of this type when it telegraphs: “Your telegram reached us on the very day we wound up final shipments of Earl and Freed liquidation. We have no sets on hand, having

sold 50,000 since December, eighty per cent going to department stores. Survey of situation, with view to buying additional quantities, other makes, reveals very little surplus merchandise available.”

AND there is an even brighter aspect of this picture. There is every reason to believe that more high class radio equipment was purchased by the American people during January and February than during these same months of last year. This means that more people are “radio-conscious” than ever before. With the broadening of interest in radio reception will come not only a larger market for replacement tubes but the creation, by these very persons who purchased quality sets at special prices, of an interest in radio on the part of their friends not now the proud possessors of modern sets. This market is the logical opportunity for the independent dealer handling standard merchandise at established values.

IN the light of these facts it is time for radio dealers to forget the past and again join the ranks of those who are battling for business. We suggest that retail radio men take for a slogan under which to wage new and aggressive sales campaigns, these words:

1930 Will Reward the Man Who Keeps Going

When J. E. Waldrop Delivers a RADIO

IT'S A SALE—



Stores are meant to sell goods in. By keeping this in mind Waldrop finds he can decrease inventory and increase net profit

By
Henry W. Baukat

Not a Demonstration!

JOY riders" are no source of joy to radio dealers. They muffle the tinkle of cash register bells and are the cause of never-ending loss and annoyance.

Knowing this situation was extremely bad in and about Atlanta, Ga., I went there to see what was being done about it. At 84 North Broad Street is located the Cable Piano Company, where, as I walked through the doorway, I was greeted by J. E. Waldrop.

"How-de-doo," said I in my best editorial manner. "I understand that home demonstrations are giving you folks a lot of trouble and I'd like to know what you are doing about it."

"That's an easy one to answer," responded Waldrop, "we analyzed that situation some months ago. On finding that home demonstrations were a drain on our net profits, we discontinued them."

Simple, isn't it? In other words, if home demonstrations are unprofitable, stop them.

But, you will say, can I do this and still sell radio sets? The answer is, yes! In fact it is working out so successfully for Waldrop that other Atlanta dealers are starting to do the same thing. Here is the manner in which Waldrop analyzed the whole thing and why and how he changed his policy:

"We stopped home demonstrations," related Waldrop, "because of what they cost us and the time they consumed."

"Some months ago we saw that 'joy riders' were getting worse in this territory instead of better, so we decided to check up and determine if we could find out just exactly what our home demonstrations cost us. By keeping careful tabs on 50 sets, we found that our sales with the home-demonstration policy amounted to about one sale out of three demonstrations. This meant that two out of three sets were returned. It is easy to see the number of times that our trucks had to make non-paying trips. Also the amount of our men's time wasted.

NEXT we considered the question of tubes. A great many tubes, we thought, were sent back from home demonstrations in a non-operative condition but we had never checked it. So we decided to keep track of five, eight-tube sets. That represented an investment of about \$72 in tubes. Well, when the final check was made we found that six of the 40 returned tubes were no good for further use. Assuming an average cost price of \$1.75 a tube, this represented a loss of \$10.50 in tubes alone for the five sets demonstrated.

"Also, the damage to cabinets amounted to quite an item with us, since we found it necessary to refinish 28 out of every 50; especially on combination radio-phonograph sets, of which we sell quite a few. Furthermore, we found that on the combinations returned a good percentage of the pick-ups were out of adjustment and many of the turn tables needed touching up. Sometimes

there was a needle cup gone. Numerous other little items had to be taken care of which meant expense to us. Of course, it is hardly fair to blame all of this on the customer as some of these troubles can occur during transportation both to and from the customer's home. But it must all be counted in on the cost of the home demonstration.

"Aside from the items mentioned, you always have the cost of temporary connections, ground clamps and wire, and the service man's time all of which are lost to us if the sale is not made.

"So, when we finally got through with our check-up, we found that it cost us approximately \$15 a set for a home demonstration.

LET us figure out just exactly what all these losses mean. As we made one sale out of three, we incurred a \$30 expense from the two demonstrations where no sale was made. In the one instance of a completed sale we will have at least a \$5 sales cost. Therefore, for the three sets, we have a total selling expense of \$35, which includes demonstration, installation, trucking and other sales expense, all of which has to come out of the profits of the one sale.

"Now let's say the selling price of the one set was \$160, and our discount 40 per cent. How do we make out in a proposition of this kind? We find that \$35 is about 22 per cent of \$160. The following table based on an average radio dealer's operation shows clearly our total expenditures:

Occupancy	$4.5 \times \$160 =$	\$7.20
Selling	$220 \times \$160 =$	35.20
Administration	$4.0 \times \$160 =$	6.40
Publicity	$3.2 \times \$160 =$	5.12
Servicing	$1.3 \times \$160 =$	2.08
Other Expenses	$4.0 \times \$160 =$	6.40
		<hr/>
		Total \$62.40

"This results in a total expense of \$62.40. As we have taken our discount as 40 per cent, we have a gross margin of \$64. However, when we subtract \$62.40 from \$64, we only have \$1.60 left. Not much profit in that kind of business is there?

"So you see if we only sell one set in three we just about break even. As soon as we saw just what was going on it was decided that the best thing to do was to discontinue home demonstrations at once. This we did and are now finding that, relieved from our former terrific sales expense, our net profits are growing.

"To be sure we turn away some customers and lose some who probably would buy a set if they could get a home demonstration. But in the long run we would rather enforce this policy and lose a few sales, because so far it has proven out that our profits at the end of the year will be much greater than if we had given home demonstrations.

(Please turn to page 58)

• THE EMPIRE BUILDERS

This photograph gives an idea of the staff and equipment required to produce these popular programs.

At the microphone is Harvey Hays, "The Old Pioneer," and Bob MacGimsey, the whistler. Raymond Knight, director, is in the left foreground. Andy Sannella is seen conducting the orchestra. This event is staged every week over a large NBC chain.



WELCOME LEWIS

The camera catches Welcome Lewis, one of the brightest stars of radio, in a wistful moment. She has been in radio only five months but is featured on the Fleischmann Sunshine Hour over a coast-to-coast network of NBC.



Know

Facts About

Information that will help programs—Show these



THE JAMESSES (Above)

Pa James, of the NBC program, "The Jameses," is like all husbands—he must have his little joke. Pa, played by Percy Hemus, is shown appreciating the joke with Ma James (Jeanne Owens). The Jameses are heard Saturday evenings.

"FORTY FATHOM TRAWLERS"

"Well, boys, she was a pretty staunch craft and—"

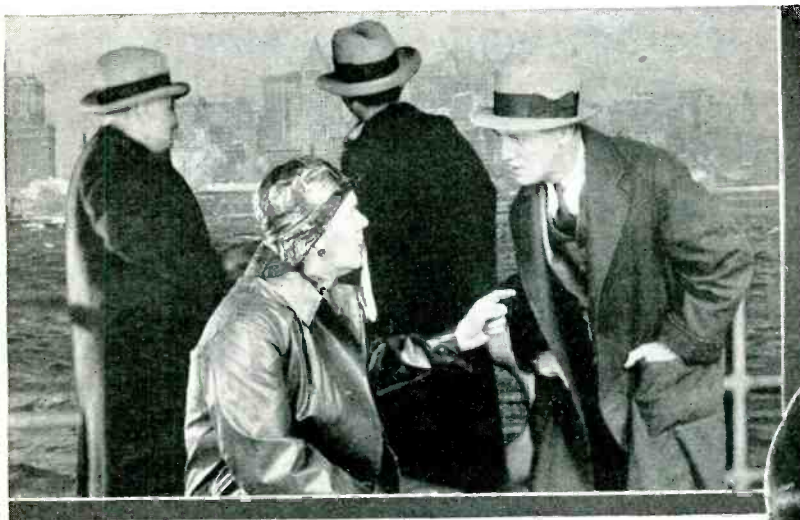
Down in the mess room of the "Spray," Captain Haft, "Old Forty Fathom," spins his yarns of the sea. This thrilling event occurs every Wednesday at 8:30 o'clock (EST) over the Columbia Broadcasting system.

SMITH BROTHERS
(Right)

Harold "Scrappy" Lambert and Billy Hillpot, comedians and songsters in the Smith Brothers program broadcast weekly through the National Broadcasting System, formed their entertainment team while both were still in college.

In addition to their work as the Smith Brothers, both artists are heard frequently in other NBC programs. Besides their comedy chatter and vocal numbers, the boys are skilled instrumentalists.





HARBOR LIGHTS

From the deck of his ferry boat, Captain Jimmy Norton tells his young friend, Joe, about the marvelous adventures he experienced during his years at sea. Here they are: Captain Norton (Edwin Whitney) left, and Joe (Leslie Joy) the chief characters in the NBC weekly program of the sea, "Harbor Lights." They are heard every Friday night at 9 o'clock (EST) through the NBC associated stations.

These Radio's Stars

you "dramatize" popular pages to prospects.



OLIVE SHEA

Ever since Olive Shea, station WABC, was notified that she had been selected as the "most beautiful radio artist in America," she has been a very busy young lady.

Numerous offers and commercial propositions have poured in because she can sing, act and even dance.

MARY AND BOB (Left)



Mary and Bob, of the True Story Hour, heard every Friday night over the Columbia Broadcasting System, have a true story as absorbing as any they have found in their travels.

While sitting on a bench in Central Park, Bob picked up a copy of True Story magazine. Looking it over, he hit upon a great idea.

He told his plan to Bernard MacFadden, who commissioned Bob and his wife, Mary, to tour the country in search of human experiences.



AMOS 'N' ANDY (Above)

Freeman Gosden and Charles J. Correll are known to radio listeners as "Amos 'n' Andy." Due to the nationwide interest in these 15 minute sketches, the pair now are heard twice nightly, six nights a week over NBC.

THE NIT WITS (Left)

"Fun for All and All for Fun" is the microphone cry of the Nit Wits every Saturday evening over WABC and associated stations.

Left to right, are: Chief Nit Wit, Lizzie Twitch, Professor R. U. Musclebound, Aphrodite Godiva, Eczema Succotash, Patience Bumpstead, Madame, Mocha de Poika, and, in the rear, Lord Algernon Ashcart.



"Radio Retailing" acknowledges the courtesy of the National Union Radio Corporation through whose initial efforts much of the above material was compiled.



J. Newcomb Blackman

*Recently elected president of the
National Federation of Radio Associations,*

Addresses a message of cheer to our readers

Mr. Blackman also is vice-president of the Radio Wholesalers Association. He heads the Blackman Distributing Co., Inc., New York, N. Y., Metropolitan wholesalers for the Edison line of radio products, and is vice-president of the French-Nestor Co., Jacksonville, Fla.

Federated's new president is well known throughout the entire East. In 1898 he entered the talking machine business as one of Edison's pioneer distributors. Four years later he organized the Blackman Talking Machine Company.

The industry is indeed fortunate to have a man of Mr. Blackman's experience, ability and reputation for fearless leadership at the helm of the NFRA.

Look Up!

RADIO history of a decidedly encouraging character was made at Cleveland, February tenth and eleventh. The constructive deliberations of all branches of this wonderful industry of ours marked the definite beginning of a *new and better era* for radio men.

When six hundred busy dealers, jobbers and manufacturers will travel from cities and towns all over the United States to discuss together vital industry issues—and when these “best minds” tackle their problems as intelligently as was done at the Hotel Statler—then, I say, we need have no fear for our ultimate future.

I take this opportunity to acknowledge my deep appreciation of the honor which has been conferred upon me and to assure my readers that I will carry out my responsibilities of leadership with the best interests of the dealer and the wholesaler ever in mind.

What, then, is Federated's job for the next year?

To better appreciate its objectives, suppose we review, briefly, certain underlying causes.

IS IT not an indisputable fact that ninety per cent of our troubles have been caused by one parent fault—excessive, unregulated enthusiasm? This basic characteristic of we Americans has, in radio, produced a veritable family of undesirable offsprings, “even unto the third generation.” The manufacturers have been persistent over-producers—which action, in turn, has been largely accountable for unwise price changes, ill-considered “quota systems,” and the ill-timed introduction of new models and devices. The final offspring of this “Jukes” family has been the worst child of all: “Dumping.” Jobbers, because of pressure from “above” have franchised (?) too many under-nourished dealers; and they have then turned them loose in the wide, wide world, to survive or perish. And the dealers, who are more to be pitied than censured, needs must carry the double burden of inefficiency and unbalanced quotas—

and this in a market which is being shot from under them by the faulty markmanship of those very manufacturers who would see them prosper.

These were the matters that were handled without gloves at the Cleveland convention. And, because we are facing these facts at their worst, do you not agree with me that we have reached the turn of the road, that we can master our errors, that those who are qualified for this business should fight the winning fight?

SPACE does not permit me to present in detail the many matters covered in the dealer, jobber and joint meetings of Federated. Suffice here to state that the following subjects received special attention: the distribution and disposal of “distress merchandise” so that the ethical dealer, not the gyp, may profit thereby; educating dealers to be better business men; practical trade-in and demonstration policies suited for local enforcement; a code of advertising ethics; the tube situation; means for collecting authentic market absorption figures with a view to regulating outputs; the stabilization of values, the control of new model announcements and the restoration of public confidence in the industry as a whole.

In the light of these developments I feel that there is not the slightest cause for undue alarm. The elimination of wasteful competition and of the type of business or persons who can only float with the tide, will quickly clear the way for those who are entitled to carry on.

Now is the time for fruitful co-operation between the manufacturer, the distributor, and the dealer. For my part I pledge a strengthening of that spirit of working together which was so much in evidence at Cleveland between those great and thoroughly organized associations of the radio industry: the Radio Manufacturers Association, the National Association of Broadcasters, the Radio Wholesalers Association and the National Federation of Radio Associations.

"An Ounce of Prevention"



*Corrective measures
advocated
by the leaders
at Cleveland.
Broadcast zoning,
accessory sales,
trade-ins discussed*

"DURING 1930 our whole radio situation is going to work on a better and sounder foundation because I am sure the manufacturing interests are going to come together and co-operate more closely than they have in the past. I see in our situation a dropping-off at the edges of some of the units that had no right to stay there, but in the center are coming up solid, able men who understand their business, and who are building for permanency." *Michael Ert, past president, NFRA.*

BROADCASTING IN EXCELLENT SHAPE

"THE business of broadcasting is in better shape today than it has ever been. It is beginning to be established on a sound economic basis.

"The Association (National Association of Broadcasters) is still striving for sound legislation. We are opposed to the zone system. When the zones were created it was for the purpose of getting a geographical distribution of the members of the Commission in order that all parts of the country might be represented. The original law did not impose any administrative requirements upon the several zones. President Hoover in his message to Congress has asked Congress to remove the original requirements of appointing commissioners from the respective zones.

"We believe that Congress should go one step farther by removing the administrative provision in respect to zones." *William S. Hedges, president, the National Association of Broadcasters.*

ACCESSORY ADDITIONS

"WHOLESALEERS should contact their retailers in order to call attention to selling such accessories

as extra loud speakers for every radio set sold. Portable radios, electric reducers, furniture cabinets, insulators, electrifiers, home wiring, and other radio installations make good accessory additions to every accessory business. A new and very broad field is now opened by having radio sets available that may be installed in automobiles." *Allan C. Forbes, Midwest*

Radio Trades Association, Chicago, Illinois.

LIFE BLOOD LIQUID ASSETS

"THE life blood of any industry whether it be radio or any other business is the quick liquid assets of that business. . . . When dealers fight each other on time payment, trade-in allowances, etc., they are seriously affecting the opportunity of developing their business." *David M. Trilling, Trilling & Montague, Philadelphia.*

TRADE-IN URGE NOT TO BE FEARED

"THE trade-in problem is one that is here to stay, but it is not to be construed as a sales disadvantage but rather as a sales *advantage*. The people are committed to the product of radio and are rapidly being accustomed to its usage. There is always a tendency on the part of the public to become dissatisfied with anything that they have for a considerable length of time and to want to purchase a new model. This psychology of the human race should aid greatly in stimulating sales and in opening new avenues for the sale of radio apparatus.

"The trade-in situation is jointly the problem of the manufacturer, wholesaler, dealer, salesman and consumer. Its cost should be distributed over the entire group.

"In discussing how the trade-in problem could be solved, I believe that the first thing that is needed is Thought and that the thinking should be done *collectively*. A unification is absolutely necessary and required and is a clean cut basis of working out the problem. Everyone must stand firm on their trade-in allowances, however, so as to prevent over-bidding one another on trade-in values." *Dr. George W. Allison, Chicago, Ill.*

Specifications of Radio Receivers and Phonograph Combinations

The following specifications represent the lines now being carried by the various companies. As these will be added to at the Trade Show in June they are not to be taken as complete 1930 lists. These figures will be revised after the show and the corrected list published in the fall.

Name and Address of Manufacturer	Model Number	List Price		Cabinet		AC, D.C. or Battery Operated	Type of Speaker	Overall Dimensions, In. H—W—D	Type of Tubes Used					Rectifier	Watts Total	Tone Control	Features				Total Shipping Weight, Lbs.
		East	West	Style	Finish				1	2	3	4	Detector				A. F.	1	2	Remote Control	
Acme Electric & Mfg. Co. 1444 Hamilton Ave. Cleveland, Ohio TRADE NAME—ACME	88	\$135.00	\$155.00	Low Boy	Walnut	110-60	Dynamic	42x25 1/2 x 14 1/2					227	2-245	280	No	No	Yes	Yes	110	
	88			High Boy	Walnut	110-60	Dynamic	51 1/2 x 25 x 14 1/2					227	2-245	280	No	No	Yes	Yes	143	
Advance Electric Co. 1260 W. 2 St. Los Angeles, Calif. Trade Name—FALCK	27	99.50	109.50	Table Console	Walnut	110-60	Dynamic	18 1/2 x 17 1/2 x 11 1/2	224	227	227	227	2-245	280	No	No	No	No	50		
	26 23			Console	Walnut	110-60	Dynamic	37x23x13 1/2	224	227	227	227	2-245	280	No	No	No	No	75		
American Bosch Magneto Corp. Springfield, Mass. Trade Name—BOSCH	48	119.50	122.50	Table	Walnut	110-60	Dynamic	44x28x13 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	79		
	49	168.50	172.50	Console	Walnut	110-60	Dynamic	42	224	224	224	224	2-245	280	No	No	Yes	Yes	79		
	54A1)	133.50	137.50	Console	Walnut	Battery	Magnetic	42	224	224	224	224	2-171A	185	No	No	Yes	Yes	125		
	48A	168.50	172.50	Console	Walnut	110-60	Dynamic	42	224	224	224	224	2-112A	280	No	No	Yes	Yes	98		
	49A	168.50	172.50	Console	Walnut	110-25	Dynamic	42	224	224	224	224	2-245	280	No	No	Yes	Yes	123		
	56	95.00	97.50	Table	Walnut	Battery	Dynamic	42	224	224	224	224	2-112A	105	No	No	Yes	Yes	127		
	*48C	155.00	159.00	Low Boy	Walnut	110-60	Dynamic	44x28x13 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	56		
	*48I	240.00	248.00	High Boy	Walnut	110-60	Dynamic	51 1/2 x 29	224	224	224	224	2-245	280	No	No	Yes	Yes	133		
	*48J	230.00	239.00	High Boy	Walnut	110-60	Dynamic	47x28x15	224	224	224	224	2-245	280	No	No	Yes	Yes	133		
	*48K	198.50	205.50	High Boy	Walnut	110-60	Dynamic	48x28x15 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	133		
	*48L	260.00	290.00	High Boy	Walnut	110-60	Dynamic	48x28x15 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	133		
	*48-16	198.50	205.50	High Boy	Walnut	110-60	Dynamic	48x28x15 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	133		
*48-17	230.00	239.00	High Boy	Walnut	110-60	Dynamic	48x28x15 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	133			
*48-18	240.00	248.00	High Boy	Walnut	110-60	Dynamic	49 1/2 x 28 1/2 x 16 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	133			
*48-19	260.00	290.00	High Boy	Walnut	110-60	Dynamic	53x31x17	224	224	224	224	2-245	280	No	No	Yes	Yes	133			
*Also furnished in 25 cycles same prices, and 110 volt D.C. Note—Add 4 lbs. for 25 cycles.																					
Amrad Corp. 205 College Ave. Medford Hillside, Mass. Trade Name—AMRAD	Minuet	158.00	168.00	High Boy	Laurel and Walnut	110-60	Dynamic	42 1/2 x 22 1/2 x 16	224	224	224	224	227	2-245	280	No	No	Yes	Yes	133	
	Aria	198.00	213.00	High Boy	Walnut	110-60	Dynamic	42 1/2 x 22 1/2 x 16	224	224	224	224	227	2-245	280	No	No	Yes	Yes	150	
	Serenata	245.00	260.00	High Boy	Walnut	110-60	Dynamic	49x25x17	224	224	224	224	227	2-245	280	No	No	Yes	Yes	175	
	Symphony	295.00	310.00	High Boy	Laurel	110-60 & 25	Dynamic	49x25x17	224	224	224	224	227	2-245	280	No	No	Yes	Yes	180	
Andrea Inc., F.A.D. 24 Orchard St. L. I. City, N. Y. Trade Name—FADA	Duet	495.00	520.00	High Boy	Laurel	110-60 & 25	Dynamic	10 1/2 x 19 1/2 x 13	224	224	224	224	227	2-245	280	No	No	No	No	245	
	25	165.00	172.00	High Boy	Walnut	110-60	Dynamic	45 1/2 x 26 1/2 x 15 1/2	227	227	227	227	2-245	280	No	No	Yes	Yes	104 1/2		
	25Z	170.50	177.50	High Boy	Walnut	110-25	Dynamic	50x27x17 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	108 1/2		
	35	245.00	255.00	High Boy	Walnut	110-60	Dynamic	50x27x17 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	150		
	35Z	255.00	260.00	High Boy	Walnut	110-25	Dynamic	50x27x17 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	155		
	35B	255.00	265.00	High Boy	Walnut	110-60	Dynamic	50x27x17 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	146 1/2		
	35C	220.00	230.00	High Boy	Walnut	110-60	Dynamic	50x27x17 1/2	227	227	227	227	2-210	280	No	No	Yes	Yes	175		
	75	370.00	370.00	High Boy	Walnut	110-60	Dynamic	50x27x17 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	140		
	75Z	172.00	185.00	High Boy	Walnut	110-60	Dynamic	50x27x17 1/2	224	224	224	224	2-245	280	No	No	Yes	Yes	140		
	22	55.00	57.50	Table	Walnut	Battery	Dynamic	10 1/2 x 19 1/2 x 13	112A	112A	112A	112A	112A	2-171A	200	No	No	Yes	Yes	44	
Atchison Radio Mfg. Co. 125 No. 6 St. Atchison, Kansas Trade Name—ATCHISON*	77	675.00		High Boy	Walnut	110-60	Dynamic	45 1/2 x 34 x 20 1/2	224	224	224	224	227	2-210	281	No	No	Yes	Yes	294	
	8	60.00		Table	Moire	Battery	Optional	7x10 1/2 x 11 1/2	222	222	222	222	171			No	No	Yes	Yes	30 1/2	
	9-Auto	125.00*		Cast aluminum	Walnut	Battery	Magnetic	6 1/2 x 8 1/2 x 8 1/2	224	224	224	224	171 or 112			No	No	Yes	Yes	30 1/2	
Atwater Kent Mfg. Co. 4700 W. 138th St. Philadelphia, Pa. Trade Name—ATWATER KENT	1055	109.00	113.00	Low Boy	Walnut	110-60	Dynamic	38 1/2 x 25 x 15 1/2	224	224	224	224	2-245	280	No	No	No	No	149 1/2		
	1055-F	109.00	113.00	Low Boy	Walnut	110-25	Dynamic	38 1/2 x 25 x 15 1/2	224	224	224	224	2-271A	280	No	No	No	No	170 1/2		
	1060	121.00	126.00	Low Boy	Walnut	110-60	Dynamic	38 1/2 x 25 x 15 1/2	222	222	222	222	2-245	280	No	No	No	No	151 1/2		
	1061	121.00	126.00	Low Boy	Walnut	110 DC	Dynamic	38 1/2 x 25 x 15 1/2	222	222	222	222	2-171A	280	No	No	No	No	147		
	1067	103.00	107.00	Low Boy	Walnut	Battery	Dynamic	38 1/2 x 25 x 15 1/2	222	222	222	222	2-171A	15	No	No	No	No	158		
1066	155.00	161.00	Low Boy	Walnut	110-60	Dynamic	38 1/2 x 25 x 15 1/2	224	224	224	224	2-250	2-281	195	No	No	Yes	Yes	170		

Audala Radio Co. 430 South Green Chicago, Ill. Trade Name—AUDIOLA	7330 8430	*Chassis only	110-60 110-60	Dynamic Dynamic	4 1/2 x 18 1/2 x 13 1/2 4 1/2 x 18 1/2 x 13 1/2	224 227	224 227	227 227	227 227	280 280	105 110	No No	No No	No No	No No	42 42
Automatic Radio Mfg. Co. 112 Canal St., Boston Mass. Trade Name—THOM THUMB	57.50 65.00 87.50 95.00	Portable Portable Portable Portable	Battery Battery 110 DC 110-60	Air-Col. Magnetic Magnetic Magnetic	12 1/2 x 8 1/2 x 13 12 1/2 x 11 x 13 12 1/2 x 11 x 13 12 1/2 x 11 x 13	199 199 201A 226	199 199 201A 226	199 201A 171A	280 280	25 15	No No No No No No	No No No No No No	No No No No No No	No No No No No No	19 21 33 37	
Automobile Radio Corp. 3707 Queens Blvd. Long Island City, L. I. Trade Name—TRANSISTONE	120.00	Metal box, auto installed	Battery	Magnetic	5 1/2 x 8 1/2 x 10 1/2	201A	201A	201A	112A 171A 112A		Com bin e d v o l u m e c o n t r o l	No No No No No No	No No No No No No	No No No No No No	72	
Balkett Radio Co. North Chicago, Ill. Trade Name—BALKEIT	175.00 75.00	High Boy Chassis	110-60 110-60	Dynamic Dynamic	50 x 26 1/2 x 17 1/2 8 1/2 x 20 1/2 x 11 1/2	227 227	227 227	227 227	227 224	280 280	90 75	No No	No No	No No	167 41	
Barty Radio Corp. 11-42 31st Ave. L. I. City, N. Y. Trade Name—CHELSEA	65.00 70.00 89.50 94.50 75.00 80.00 90.00 104.50	Table Table Console Console Table Table Console Console Call frequency	110-60 110-60 110-60 110-60 110-60 110-60 110-60 110-60	Inductor Inductor Inductor Inductor Dynamic Dynamic	24 x 13 x 13 24 x 13 x 13 4 1/2 x 13 x 13 4 1/2 x 13 x 13 25 x 13 x 13 44 x 13 x 13	226 226 226 226 226 226 226 226	226 226 226 226 226 226 226 226	226 226 226 226 226 226 226 226	226 224 224 224 224 224 224 224	280 280 280 280 280 280 280 280	50 50 50 50 65 65 65 65	Yes Yes Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes Yes	48 48 74 74 50 50 78 78	
Browning-Drake Corp. 224 Calvary St. Waltham, Mass. Trade Name—BROWNING-DRAKE	188.50 142.50 102.50 119.50 75.00	High Boy Low Boy Table High Boy Table	110-60 110-60 110-60 110-60 110-60	Dynamic Dynamic Inductor Inductor Dynamic	47 x 29 x 16 38 x 26 x 14 10 x 20 1/2 x 11 1/2 38 x 26 x 14 10 x 20 1/2 x 11 1/2	224 224 224 224 224	224 224 224 224 224	224 227 227 227 227	224 224 224 224 224	280 280 280	95 95	No No No No No	No No No No No	No No No No No	139 103 99 84 38	
Brunswick-Balke-Collender Co. 623 So. Wabash Ave. Chicago, Ill. Trade Name—BRUNSWICK	129.00 154.00	Low Boy High Boy	110-60 110-60	Dynamic Dynamic	44 x 25 1/2 x 16 52 1/2 x 27 1/2 x 17	224 224	224 224	224 224	224 224	280 280	125 125	No No	No No	No No	129 152	
Bush & Lane Piano Co. Holland, Mich. Trade Name—BUSH & LANE	249.00 115.00 149.50 169.50 187.50 197.50 207.50 217.50 172.50	High Boy Console Table Low Boy Low Boy High Boy High Boy Low Boy High Boy	110-60 60 60 60 60 110 110 110	Dynamic Dynamic Dynamic Dynamic Dynamic Dynamic Dynamic Dynamic	50 x 29 x 18 9 1/2 x 22 1/2 x 14 1/2 39 1/2 x 23 1/2 x 14 1/2 40 1/2 x 23 1/2 x 16 1/2 39 1/2 x 26 1/2 x 15 1/2 46 1/2 x 27 1/2 x 16 1/2 47 1/2 x 27 1/2 x 16 1/2 40 1/2 x 28 1/2 x 17 1/2 45 1/2 x 26 1/2 x 16 1/2	224 224 224 224 224 224 224 224 224	224 224 224 224 224 224 224 224 224	224 224 224 224 224 224 224 224 224	224 224 224 224 224 224 224 224 224	280 280 280 280 280 280 280 280 280	130 85 85 85 85 85 85 85 90	No No No No No No No No No	No No No No No No No No No	No No No No No No No No No	195 53 102 120 120 146 146 140 155	
Colonial Radio Corp. 25 Wilbur Ave. Long Is. City, N. Y. Trade Name—COLONIAL	175.00 175.00 235.00 175.00 175.00 235.00	High Boy High Boy High Boy High Boy High Boy High Boy	110-60* 110-60* 110-60* 110 DC 110 DC 110 DC	Dynamic Dynamic Dynamic Dynamic Dynamic Dynamic	47 1/2 x 25 1/2 x 15 1/2 47 1/2 x 26 1/2 x 15 1/2 47 1/2 x 27 x 15 1/2 47 1/2 x 25 1/2 x 15 1/2 47 1/2 x 26 1/2 x 15 1/2 47 1/2 x 27 x 15 1/2	224 224 224 224 224 224	224 224 224 224 224 224	224 224 224 224 224 224	224 224 224 224 224 224	280 280 280	90 90 90 175 175 175	No No No No No No	No No No No No No	No No No No No No	150 150 150 150 150 150	
Continental Radio Corp. E. Pontiac Extended P. Wayne, Ind. Trade Name—STAR-RAIDER	435.00 475.00 525.00	High Boy High Boy High Boy	110-60 110-60 110-60	Dynamic Dynamic Dynamic	52 x 30 x 18 48 x 30 x 18 49 1/2 x 30 x 21	484 484 484	484 484 484	484 484 484	484 484 484	200 200 200	200 200 200	No No No	No No No	No No No	230 2.0 260	
Crosley Radio Corp. Arlington St. Cincinnati, Ohio Trade Name—CROSLEY (Continued)	725.00 49.00 88.50 91.50 56.50 107.00 110.00 65.85 115.00	Low Boy Metal High Boy High Boy Metal High Boy High Boy Metal High Boy	110-60 110-60 110-60 110-60 110-60 110-60 110-60 110-60 110-60	Dynamic Magnetic Magnetic Magnetic Dynamic Dynamic Dynamic Dynamic Dynamic	49 x 35 x 24 7 1/2 x 17 1/2 x 10 1/2 40 1/2 x 26 1/2 x 14 41 x 28 x 15 1/2 7 1/2 x 17 1/2 x 10 1/2 40 1/2 x 26 1/2 x 14 41 x 28 x 15 1/2 7 1/2 x 20 1/2 x 10 1/2 40 1/2 x 26 1/2 x 14	484 222 222 222 222 224 224 224 224	484 222 222 222 222 224 224 224 224	484 222 222 222 222 224 224 224 224	484 201A 201A 201A 227 227 227 227 227	240 280 280 280 280 280 280 280 280	240 100 100 100 110 110	No No No No No No No No No	No No No No No No No No No	No No No No No No No No No	340 43 100 110 63 107 106 74 110	

Radio-Phonograph Combination

Browning-Drake Corp. 224 Calvary St. Waltham, Mass. Trade Name—BROWNING-DRAKE	249.00 115.00 149.50 169.50 187.50 197.50 207.50 217.50 172.50	High Boy Console Table Low Boy Low Boy High Boy High Boy Low Boy High Boy	110-60 60 60 60 60 110 110 110	Dynamic Dynamic Dynamic Dynamic Dynamic Dynamic Dynamic Dynamic	50 x 29 x 18 9 1/2 x 22 1/2 x 14 1/2 39 1/2 x 23 1/2 x 14 1/2 40 1/2 x 23 1/2 x 16 1/2 39 1/2 x 26 1/2 x 15 1/2 46 1/2 x 27 1/2 x 16 1/2 47 1/2 x 27 1/2 x 16 1/2 40 1/2 x 28 1/2 x 17 1/2 45 1/2 x 26 1/2 x 16 1/2	224 224 224 224 224 224 224 224 224	224 224 224 224 224 224 224 224 224	224 224 224 224 224 224 224 224 224	224 224 224 224 224 224 224 224 224	280 280 280 280 280 280 280 280 280	130 85 85 85 85 85 85 85 90	No No No No No No No No No	No No No No No No No No No	No No No No No No No No No	195 53 102 120 120 146 146 140 155
Colonial Radio Corp. 25 Wilbur Ave. Long Is. City, N. Y. Trade Name—COLONIAL	175.00 175.00 235.00 175.00 175.00 235.00	High Boy High Boy High Boy High Boy High Boy High Boy	110-60* 110-60* 110-60* 110 DC 110 DC 110 DC	Dynamic Dynamic Dynamic Dynamic Dynamic Dynamic	47 1/2 x 25 1/2 x 15 1/2 47 1/2 x 26 1/2 x 15 1/2 47 1/2 x 27 x 15 1/2 47 1/2 x 25 1/2 x 15 1/2 47 1/2 x 26 1/2 x 15 1/2 47 1/2 x 27 x 15 1/2	224 224 224 224 224 224	224 224 224 224 224 224	224 224 224 224 224 224	224 224 224 224 224 224	280 280 280	90 90 90 175 175 175	No No No No No No	No No No No No No	No No No No No No	150 150 150 150 150 150
Continental Radio Corp. E. Pontiac Extended P. Wayne, Ind. Trade Name—STAR-RAIDER	435.00 475.00 525.00	High Boy High Boy High Boy	110-60 110-60 110-60	Dynamic Dynamic Dynamic	52 x 30 x 18 48 x 30 x 18 49 1/2 x 30 x 21	484 484 484	484 484 484	484 484 484	484 484 484	200 200 200	200 200 200	No No No	No No No	No No No	230 2.0 260

Radio-Phonograph Combination

Crosley Radio Corp. Arlington St. Cincinnati, Ohio Trade Name—CROSLEY (Continued)	725.00 49.00 88.50 91.50 56.50 107.00 110.00 65.85 115.00	Low Boy Metal High Boy High Boy Metal High Boy High Boy Metal High Boy	110-60 110-60 110-60 110-60 110-60 110-60 110-60 110-60 110-60	Dynamic Magnetic Magnetic Magnetic Dynamic Dynamic Dynamic Dynamic Dynamic	49 x 35 x 24 7 1/2 x 17 1/2 x 10 1/2 40 1/2 x 26 1/2 x 14 41 x 28 x 15 1/2 7 1/2 x 17 1/2 x 10 1/2 40 1/2 x 26 1/2 x 14 41 x 28 x 15 1/2 7 1/2 x 20 1/2 x 10 1/2 40 1/2 x 26 1/2 x 14	484 222 222 222 222 224 224 224 224	484 222 222 222 222 224 224 224 224	484 222 222 222 222 224 224 224 224	484 201A 201A 201A 227 227 227 227 227	240 280 280 280 280 280 280 280 280	240 100 100 100 110 110	No No No No No No No No No	No No No No No No No No No	No No No No No No No No No	340 43 100 110 63 107 106 74 110
--	---	--	--	--	---	---	---	---	--	---	--	--	--	--	--

Specifications of Radio Receivers and Phonograph Combinations—(Continued)

Name and Address of Manufacturer	Model Number	List Price		Cabinet		AC, DC or Battery Operated	Type of Speaker	Overall Dimensions, In. H—W—D	Type of Tubes Used					Rectifier	Watts Used by Net	Tone Control	Features				Total Shipping Weight, Lbs.		
		East	West	Style	Finish				R. F.			Detector	A. F.				Remote Control	Auto. Vol. Control	Mechanical Selector	Phono-Jack		Chassis Sold	
									1	2	3		4										1
Crosley Radio Corp. Arlington St. Cincinnati, Ohio (Continued)	4235	\$119.00	\$119.00	High Boy	Amer. Oak	110-60-25	Dynamic	41x28x15½	224	224	224	227	227	2-245	No	No	No	No	110	No	No	125	
	615 Buddy	74.85	81.35	Metal	*	220 DC	Dynamic	7½x20½x10½	222	222	222	227	227	2-171A	No	No	No	No	35	No	Yes	77	
	Playmate	55.00	57.50	Low Boy	Amer. Oak	220-25	Magnetic	24½x17½x10½	224	224	224	227	227	2-145	No	No	No	No	65	No	No	58	
	Chum	90.00	98.00	Low Boy	Amer. Oak	110-60-25	Dynamic	29½x27½x15½	224	224	224	227	227	2-171A	No	No	No	No	100	No	Yes	128	
Note—*Lithographed.	Comrade AC	75.00	78.00	Low Boy	Amer. Oak	110-60-25	Magnetic	28½x26½x14	224	224	224	227	227	2-245	No	No	No	No	66	No	No	75	
	Comrade DC	105.00	108.75	Low Boy	Amer. Oak	220-25	Dynamic	24½x27½x15½	224	224	224	227	227	2-171A	No	No	No	No	110	No	No	135	
Edison, Inc., Thos. A. Lafayette Ave. West Orange, N. J.	R5	175.00	177.00	Console	Walnut	110-60	Dynamic	42½x23½x15½	227	227	227	227	227	2-245	No	No	Yes	Yes	100	No	No	146	
	R4 Note—Also made for 25 cycles	215.00	223.00	Console	Walnut	100-60	Dynamic	46x26½x17	227	227	227	227	227	2-245	No	No	Yes	Yes	100	No	No	170	
	R4	215.00	223.00	Console	Walnut	110 DC	Dynamic	46x26½x17	227	227	227	227	227	4-171	No	No	Yes	Yes	200	No	No	170	
Radio-Phonograph Combination																							
Trade Name—EDISON																							
Electrical Research Labs., Inc. 1731 W. 22 St. Chicago, Ill. Trade Name—ERLA	C4	325.00	336.00	Console	Walnut	110 DC	Dynamic	48x28½x19	227	227	227	227	227	2-245	No	No	Yes	Yes	140	No	No	219	
	30	169.50	179.50	High Boy	Walnut	110-60	Dynamic	48½x27½x17	224	224	224	227	227	2-245	No	No	No	No	100	No	No	145	
	31	150.00	158.50	High Boy	Walnut	110-60	Dynamic	46x25½x16	224	224	224	227	227	2-245	No	No	No	No	100	No	No	133	
	32	145.00	152.50	High Boy	Walnut	110-60	Dynamic	46x25½x16	224	224	224	227	227	2-245	No	No	No	No	100	No	No	133	
Trade Name—EMERSON	32	119.50	131.50	High Boy	Walnut	Battery	Dynamic	46x25½x16	222	222	222	227	227	2-171A	No	No	No	No	100	No	No	120	
	22	69.00	76.00	Table	Metal	Battery	Magnetic	9½x22½x14½	222	222	222	227	227	2-171A	No	No	No	No	100	No	No	80	
Radio-Phonograph Combination																							
Trade Name—EMERSON																							
Emerson Radio & Phonograph Corp. 635 6 Ave. New York, N. Y. Trade Name—EMERSON	33	269.50	284.50	High Boy	Walnut	110-60	Dynamic	51x27½x17	224	224	224	227	227	2-245	No	No	Yes	Yes	100	No	No	208	
	E-3	100.00	105.00	Low Boy	Walnut	110-60	Dynamic	40x27x14½	224	224	224	227	227	2-245	No	No	No	No	85	No	No	120	
	F-3	115.00	120.00	High Boy	Walnut	110-60	Dynamic	44x26½x16	224	224	224	227	227	2-245	No	No	No	No	85	No	No	135	
	G-3	125.00	130.00	High Boy	Walnut	110-60	Dynamic	44x26½x16	224	224	224	227	227	2-245	No	No	No	No	85	No	No	140	
First National Radio Corp., 254 W. 54 St. New York, N. Y. Trade Name—FIRST NATIONAL	31	75.00	75.00	Chassis		110-60	Dynamic	8x21x9½	224	224	224	227	227	2-245	No	No	Yes	Yes	Yes	Yes	Yes	50	
	68	129.50	139.50	Low Boy	Walnut	110-60	Dynamic	41x25½x14½	226	226	226	227	227	2-245	No	No	No	No	85	No	No	140	
	72	135.00	145.00	Low Boy	Walnut	110-60	Dynamic	44x27x17½	226	226	226	227	227	2-245	No	No	No	No	85	No	No	135	
	69	195.00	205.00	High Boy	Walnut	110-60	Dynamic	46x25x18½	226	226	226	227	227	2-245	No	No	No	No	85	No	No	144	
	66	85.00	95.00	Table	Walnut	110-60	Dynamic	10x26x15½	226	226	226	227	227	2-245	No	No	No	No	85	No	No	88	
	63	159.50	169.50	Low Boy	Walnut	110-60	Dynamic	42x26x18½	224	224	224	227	227	2-245	No	No	No	No	95	No	No	148	
	94	210.00	220.00	High Boy	Walnut	110-60	Dynamic	50x35x19½	224	224	224	227	227	2-245	No	No	No	No	95	No	No	182	
	73	60.00	70.00	Table	Walnut	Battery	Magnetic	11x25x11	201A	201A	201A	201A	201A	2-112A	No	No	No	No	200	No	No	55	
74	109.50	119.50	Low Boy	Walnut	Battery	Magnetic	41x25x14½	201A	201A	201A	201A	201A	2-112A	No	No	No	No	200	No	No	108		
Giffman Bros., Inc. 1815 Venice Blvd. Los Angeles, Cal. Trade Name—GILFILLAN	100	179.50	198.50	Low Boy	Walnut	110-60	Dynamic	42x25x15	227	227	227	227	227	245	No	No	No	No	100	No	No	130	
	Open Face	198.50	210.00	Low Boy	Walnut	110-60	Dynamic	40x25x15	227	227	227	227	227	245	No	No	No	No	100	No	No	135	
	Sliding Doors	210.00	220.00	Semi-H. Boy	Walnut	110-60	Dynamic	44x27x15	227	227	227	227	227	245	No	No	No	No	100	No	No	150	
	French Doors	237.50	247.50	Table	Walnut	110-60	Dynamic	30x34x26	224	224	224	224	224	2-245	No	No	No	No	100	Yes	Yes	170	
	101	232.50	242.50	Semi-H. Boy	Walnut	110-60	Dynamic	44x27x15	224	224	224	224	224	2-245	No	No	No	No	100	Yes	Yes	150	
	103	298.50	308.50	High Boy	Walnut	110-60	Dynamic	50x30x15	224	224	224	224	224	2-245	No	No	No	No	100	Yes	Yes	190	
Graybar Electric Co. 420 Lexington Ave. New York Trade Name—GRAYBAR	550	130.00	130.00	High Boy	Walnut	110-60	Dynamic	50x25x15½	224	224	224	224	224	245	No	No	Yes	Yes	90	Yes	No	162	
	600	175.00	175.00	High Boy	Walnut	110-60	Dynamic	51x27x15½	224	224	224	224	224	245	No	No	Yes	Yes	110	Yes	No	180	
	520	133.00	133.00	Low Boy	Walnut	110-60	Dynamic	48x26x17	224	224	224	224	224	245	No	No	Yes	Yes	90	Yes	No	160	
	330	98.00	98.00	Table	Walnut	110-60	None	10½x29½x11	224	224	224	224	224	245	No	No	Yes	Yes	90	No	No	86	
Grebe & Co., Inc., A. H. 70 Van Wyck Boulevard Richmond Hill, N. Y. Trade Name—SYNCHROPHASE	21950	219.50	223.50	Low Boy	Walnut	110-25	Dynamic	29½x25x14½	224	224	224	All	A.C. Mo	280	No	No	No	No	125	No	No	128	
	270	270.00	274.00	High Boy	Walnut	60 cr	Dynamic	45x28x16½	224	224	224	227	2-245	280	No	No	No	No	210	No	No	158	
	285	285.00	292.00	High Boy	Wal. & Ma.	110	Dynamic	50½x29x18	224	224	224	All	D.C. Mo	280	No	No	No	No	210	No	No	180	
				High Boy	Wal. & Ma.	D.C.	Dynamic		224	224	224	All	D.C. Mo	280	No	No	No	No	210	No	No	180	

Note: All models are known as Super Synchrophase Receivers, Type SK-4 (Continued)

Radio-Phonograph Combination

Grebe (continued)	450	\$450.00	\$465.00	High Boy	Walnut and Rosewood	110-25 110-60 110 D.C.	Dynamic 48x29x20	(Same as above for A.C. & D.C. models)	No	No	No	Yes	Yes	262
Grigsby-Grumow Co. 5801 Dickens Ave. Chicago, Ill. Trade Name—MAJESTIC	90 91 92 93	95.00 116.00 146.00 146.00	95.00 116.00 146.00 146.00	Low Boy Low Boy High Boy	Walnut Walnut Walnut Walnut	110-60 110-60 110-60 110-60	Dynamic 37 1/2x25 1/2x15 1/2 37 1/2x25 1/2x15 1/2 50 1/2x27 1/2x18 1/2 43 1/2x28 1/2x17 1/2	G-27 G-27 G-27 G-27	G-27 G-27 G-27 G-27	G-27 G-27 G-27 G-27	2-G-45 2-G-45 2-G-45 2-G-45	No No No No	No No No No	105 105 105 105

Note—All models furnished for 25-30 cycles at \$10. increase in list price. All prices less tubes.

Radio-Phonograph Combinations

Gulbransen Co. 3232 W. Chicago Ave. Chicago, Ill. Trade Name—GULBRANSEN	102 103 291 292 9930	184.00 203.50 139.50 149.50 99.50	184.00 203.50 149.50 159.50 99.50	High Boy High Boy	Walnut Walnut Walnut Walnut	110-60 110-60 110-60 110-60	Dynamic 43 1/2x28 1/2x17 1/2 43 1/2x28 1/2x18 1/2	G-27 G-27	G-27 G-27	G-27 G-27	2-G-45 2-G-45	No No	No No	105 105	No No	No No	No No	No No	224 226
---	----------------------------------	---	---	----------------------	--------------------------------------	--------------------------------------	---	--------------	--------------	--------------	------------------	----------	----------	------------	----------	----------	----------	----------	------------

Radio-Phonograph Combination

Howard Radio Co. South Haven, Mich. Trade Name—HOWARD	200	235.00	245.00	High Boy	Walnut	110-60	Dynamic 46 1/2x28 1/2x19 1/2	226	226	224	2-245	No	No	85	No	No	No	No	224
--	-----	--------	--------	----------	--------	--------	---------------------------------	-----	-----	-----	-------	----	----	----	----	----	----	----	-----

Note: Have 60 and 25 cycle—110 and 220 volts power packs to be used with standard R.F. chassis to accommodate such power conditions.

Hyatt Electric Corp. 836 N. Wells St. Chicago, Ill. Trade Name—HYATT	"A" "D" Compact A.C.	75.00 50.00 72.50 85.00	75.00 50.00 72.50 85.00	Portable Portable Portable	Battery BATTERY BATTERY AC	110-60	Magnetic Magnetic Super-Dy. Magnetic	11x9x14 11x9x14 11x11x11	6-199 6-199 6-199			No	No	No	No	No	No	No	25 25 25 28
Jackson Research Labs. Jackson Street Malden, Mass.	NW-4 NJ-30	65.00 77.50	65.00 77.50	Table	Moire	110-60	Battery	8x17 1/2 7 1/2x10 1/2	224 224	224	171A 245	No	No	60	No	No	No	No	20 24
Kellogg Switchboard & Supply Co. 1066 W. Adams St. Chicago, Ill. Trade Name—KELLOGG	523 524 526 527	175.00 225.00 185.00 235.00	190.00 240.00 200.00 245.00	High Boy High Boy High Boy High Boy	Walnut Rare Wood Rare Wood Rare Wood	110-60 110-60 110-25 110-25	Dynamic Dynamic Dynamic Dynamic	46x29x16 50 1/2x28 1/2x16 46x29x16 50 1/2x28 1/2x16	K-24 K-24 K-24 K-24	K-24 K-24 K-24 K-24	2-245 2-250 2-245 2-250	No	No	110 195 110 195	No	No	No	No	25 25 25 28

Note: All models use 1-K-27 tube as an automatic volume control.

Radio-Phonograph Combinations

Kenper Radio Corp., Ltd. 1258 Santee St. Los Angeles, Calif. Trade Name—KENPER	525 528	395.00 405.00	415.00 425.00	Table	Rare Wood Rare Wood	110-60 110-25	Dynamic Dynamic	5 1/2x30 1/2x20 5 1/2x30 1/2x20	K-24 K-24	K-24 K-24	2-250 2-250	No	No	215 215	No	No	No	No	50
Collin B. Kennedy Corp. South Bend, Ind. Trade Name—KENNEDY *West coast only.	220 320	159.00 189.00	159.00 189.00	Low Boy High Boy	Walnut Walnut	110-60 110-60	Dynamic Dynamic	44x30 1/2x20 1/2 50 1/2x31 1/2x20 1/2	224 224	224	2-245 2-245	No	No	100 100	No	No	No	No	112 134
King Mfg. Corp. 254 Rano St. Buffalo, N. Y. Trade Name—KING *All shipments are made f.o.b. Buffalo.	97 98 101	149.50 169.50 159.50	*149.50 *169.50 *169.50	High Boy High Boy High Boy	Walnut Walnut Walnut	110-60 110-60 110-60	Dynamic Dynamic Dynamic	48x26 1/2x13 53x27 1/2x15 48x26 1/2x13	227 227 224	227	2-171 2-245 2-245	No	No	60 90 80	No	No	No	No	120 140 120
Leitz, Inc., C. B. 2700 Industrial Ave. Altoona, Pa. Trade Name—SEVEN SEAS	Seven Seas Seven Seas Seven Seas Silver Ghost	295.00 195.00 610.00 2400.00	295.00 195.00 610.00 2400.00	High Boy Low Boy Egyptian Console	Walnut Walnut Walnut Walnut	110-60 110-60 110-60 110-60	Dynamic Dynamic Dynamic Dynamic	54x34x21 38x34x21 64x36x24 84x42x24	224 224 224 224	224	2-250 2-250 2-250 2-227	No	No	200 200 200 250	No	No	No	No	200 180 450 830

Radio-Phonograph Combination

Minerva Radio Co. 18 W. Kinzie St. Chicago, Ill. Trade Name—MINERVA	31 29 27	169.00 129.00 115.00	175.00 135.00 120.00	High Boy High Boy High Boy	Walnut Walnut Walnut	110-60 110-60 110-60	Dynamic Dynamic Dynamic	54x34x21 48x27x17 48x26x16 47x25x15	224 224 227 224	227	2-250 2-245 250	No	No	200 115 105	No	No	No	No	220 140 122
---	----------------	----------------------------	----------------------------	----------------------------------	----------------------------	----------------------------	-------------------------------	--	--------------------------	-----	-----------------------	----	----	-------------------	----	----	----	----	-------------------

Shortwave & Television Lab., Inc. 70 Brookline Ave. Boston, Mass.	Trade Name— 20 20R 22	\$125.00 125.00 88.00 88.00	Table Table Table	Green & Gold metal	8 1/2 x 19 x 10 8 1/2 x 19 x 10 8 1/2 x 19 x 10	224 224 222	227 227 201A	245 245 112	280 280	60 60	U 550	reel rets	16 45 35
Silver-Marshall, Inc. 6401 W. 63rd St. Clearing, Ill. Trade Name—SILVER	Trade Name— 60 75	160.00 173.00	Low Boy Concert	Walnut Walnut	4 2/3 x 27 1/2 x 16 3 9/8 x 27 x 14	224 224	227 227	2-245 2-245	280 280	93 93	Yes Yes	No Yes	118 128
Stromberg-Carlson Telephone Mfg. Co. 100 Carlson Road. Rochester, N. Y.	Trade Name— 95 60B 75B	195.00 145.00 158.00	High Boy Low Boy Concert	Walnut Walnut Walnut	5 2/8 x 29 1/2 x 16 4 2/3 x 27 x 16 3 9/8 x 27 x 14	224 224 224	227 227 227	2-245 2-245 2-245	280 280 280	91 91 91	Yes No No	No Yes No	144 115 127
Stromberg-Carlson Trade Name— 95B	Trade Name— 641 642 646 647	145.00 155.00 259.00 239.00 347.50 347.50 (a) (b)	High Boy Table High Boy Low Boy High Boy High Boy	Walnut Walnut Walnut Walnut Walnut Walnut	5 2/8 x 29 1/2 x 16 11 x 23 x 14 4 9/8 x 26 x 16 4 2/8 x 24 x 15 4 7/8 x 27 x 16 4 9/8 x 26 x 16	224 224 224 224 224 224	227 227 227 227 227 227	2-245 245 245 245 2-245 2-245	280 280 280 280 2-280 2-280	91 90 90 160 240	No No No No No No	No Yes Yes Yes Yes Yes	140 75 130 205 155

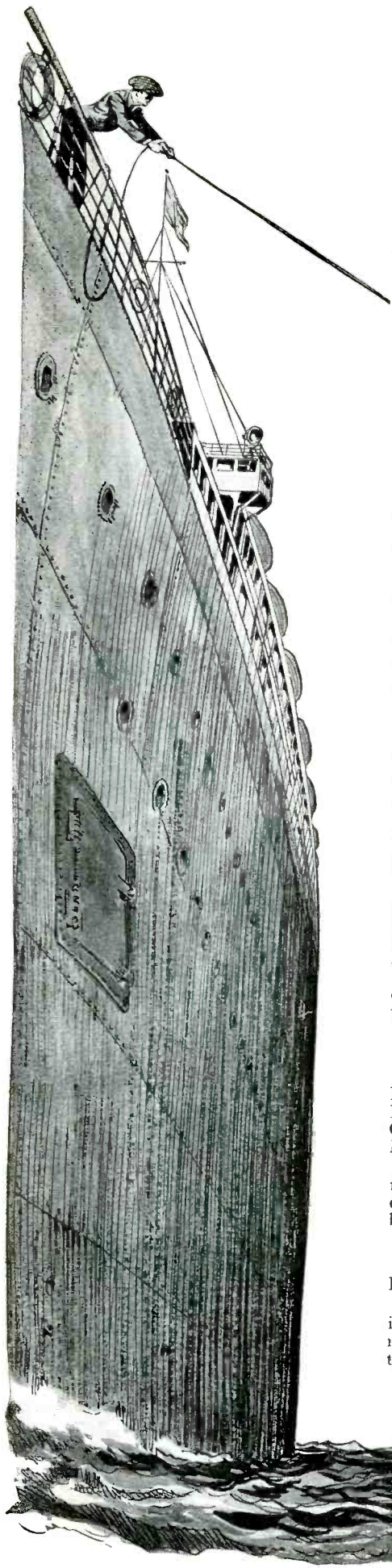
Note: (a) Deliveries in March. Prices later.

Sterling Mfg. Co. 2831 Prospect Ave. Cleveland, Ohio Trade Name—CONCERT ONE	Trade Name— 654	369.00	Comb'n	Walnut	4 6/8 x 27 1/2 x 17 1/2	224	227	245	280	120			200
Stewart-Warner Corp. 1826 Diversey Pkway. Chicago, Ill. Trade Name— 951 961 971 981	Trade Name— 951 961 971 981	95.00 95.00 97.50 103.00 78.50 130.00 142.00 111.50 140.00 143.00 153.00 121.50 157.50 151.50 162.50 165.00 139.00	Table Table Table Table Low Boy Low Boy Low Boy Low Boy Low Boy Low Boy Low Boy Low Boy Low Boy Low Boy Low Boy Low Boy	Bronze Bronze Bronze Walnut Walnut Walnut Walnut Walnut Walnut Walnut Walnut Walnut Walnut Walnut Walnut Walnut	9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12 9 1/2 x 20 1/2 x 12	224 224 224 224 224 224 224 224 224 224 224 224 224 224 224 224	227 227 227 227 227 227 227 227 227 227 227 227 227 227 227 227	2-245 2-245 2-245 2-245 2-245 2-245 2-245 2-245 2-245 2-245 2-245 2-245 2-245 2-245 2-245 2-245 2-245	280 280 280 280 280 280 280 280 280 280 280 280 280 280 280 280 280	130 140 25 25 130 25 130 25 130 25 130 25 130 25 130 25	No No No No No No No No No No No No No No No No No	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	61 63 47 70 76 72 76 72 76 72 76 72 76 72 76 72

Note—Also 25 cycle models.

Trav-Ler Mfg. Corp. 1818 Washington St. St. Louis, Mo. Trade Name—TRAV-LER	Trade Name— 6 7 10	65.00 84.00 75.00 98.10 100.00 124.60 50.00 35.00	Portable Portable Portable	Im. Leath. Im. Leath. Im. Leath.	10 1/2 x 13 x 9 13 1/2 x 15 x 9 1/2 16 x 16 x 9 1/2	222 222 222	199 199 199	199 220 220	280 280	30 35			18 26 27 12 19
United Reproducers Corp. Euclid Ave., Springfield, Ohio Trade Name—KYLECTR ON	Trade Name— K-71 K-72	149.50 169.50	High Boy High Boy	Walnut Walnut	4 3/8 x 29 1/2 x 16 1/2 4 2/8 x 27 1/2 x 18 1/2	224 224	227 227	2-245 2-245	280 280	120 120	No No	No Yes	150 170
United States Radio & Television Corp. 3201 S. Adams St. Trade Name—APEX	Trade Name— 10 11 14 54 55	89.50 115.00 140.00 87.50 49.50	Low Boy High Boy High Boy Table	Walnut Walnut Walnut Walnut Brown	3 9/8 x 26 x 13 4 0/8 x 27 1/2 x 14 4 7/8 x 27 1/2 x 16 4 2/8 x 25 1/2 x 16 8 1/2 x 18 1/2 x 13 1/2	224 224 224 224 224	227 227 227 226 226	2-245 2-245 2-245 171A 171A	280 280 280	75 75 75	No No No No No	No Yes Yes Yes Yes	95 110 123 84 82
Zenith Radio Corp. 3620 Iron Street Chicago, Ill. Trade Name—ZENITH	Trade Name— 60 602 61 62 622 64 642 67 672 563	145.00 155.00 155.00 165.00 185.00 195.00 370.00 370.00 495.00 495.00	Midget Midget Low Boy Low Boy Low Boy High Boy High Boy High Boy High Boy High Boy	Walnut Walnut Walnut Walnut Walnut Walnut Walnut Walnut Walnut Walnut	2 8/8 x 19 1/2 x 15 1/2 2 8/8 x 19 1/2 x 15 1/2 3 9/8 x 20 1/2 x 14 3 9/8 x 20 1/2 x 14 3 9/8 x 20 1/2 x 14 5 1/2 x 3 1/2 x 18 1/2 5 1/2 x 3 1/2 x 18 1/2 5 1/2 x 3 1/2 x 18 1/2 5 1/2 x 3 1/2 x 18 1/2 5 1/2 x 3 1/2 x 18 1/2	224 224 224 224 224 224 224 224 224 224	227 227 227 227 227 227 227 227 227 227	2-227 2-227 2-227 2-227 2-227 2-227 2-227 2-227 2-227 2-227	280 280 280 280 280 280 280 280 280 280	110 110 110 110 110 110 110 110 110 110	No No No No No No No No No No	No Yes Yes Yes Yes Yes Yes Yes Yes Yes	112 112 153 153 159 159 223 223 254 254

Note: 3rd AF 4-171A. Note: 3rd AF all A.C. models 2-245.



The Great

Documents Found at Sea Reasons Why Radio

THE sea is replete with tales of weird and tragic messages taken from bottles found floating far from land, but it is doubtful if ever it has yielded a grimmer story than that of the radio merchant, David Martin, whose mysterious disappearance six months ago excited wide attention.

I was returning from the Riviera on the *Ile de France* and, as we were ploughing through the Grand Banks of Newfoundland, I noticed what seemed to be a small packing box tossing in the surging waves to windward. The box preyed on my mind but, uncertain what to do, an hour had passed before I went to the captain's stateroom to rouse him and relate my discovery.

He immediately ordered the *Ile de France* to be turned about and, after a feverish search, the box was sighted and brought aboard.

It was filled with water-soaked letters. Imagine my amazement when, after drying them, I found that I was in possession of certain correspondence between the ill-fated radio merchant, David Martin, and one of his customers, a Bruce Sanderson.

Exposure to the raging seas had obliterated the wording on many originals and carbons, but enough remained intact to afford a vivid picture of Martin's last days in the radio business, and to indicate his fate. I now submit these letters to the radio fraternity without comment, allowing each radio merchant to supply his own solution of the mystery.

Mr. Bruce Sanderson,
Rain-In-The-Face, Ariz.

May 5, 1929.

My dear Mr. Sanderson:

Mr. Crosby, of our service department, who installed your new Model 13 Hallelujah last evening, reports that the set was going fine when he left and that you were delighted with it. I take the opportunity to let you know that we not only appreciate the business you have given us, but that the expert facilities of our service department are always at your disposal. Please avail yourself of them freely.

I enclose a handy little account book in which I have entered credit for your \$38.50 down payment. There is a balance of \$180 to be paid and, on the 4th of each month, when you make one of the twelve payments of \$15 each, we will credit it in the book.

Faithfully yours,

DAVE'S RADIO STORE,
David Martin, President.

Mr. David Martin, President,
Dave's Radio Store,
Geronimo City, Ariz.

May 6, 1929.

Dear Mr. Martin:

The Model 13 Hallelujah was going fine when your Mr. Crosby left, but shortly after that it began to make funny noises. It fades too—not just station fades, but all over the dial. It fades and then it goes b-r-r-r-r-r-p—b-r-r-r-r-r-p—then it fades—then it goes b-r-r-r-r-r-p—b-r-r-r-r-r-p—funny noises—please send your serviceman.

Cordially yours,

Bruce Sanderson.

Dear Mr. Martin:

May 9, 1929.

Your mechanic, Otto Schmalhausen, worked on the set for five hours yesterday but it is just as bad as when he came. It still fades and goes b-r-r-r-r-r-p—b-r-r-r-r-r-p—makes funny noises—and the hum is awful. Please send a service man who knows something about Model 13 Hallelujahs.

Very truly yours,

Bruce Sanderson

Martin Mystery

By Alan Streeter

Shed New Light on Tragic Merchants Leave Home

August 21, 1929.

Gents:
Go ahead and sue me, you cheap pushcart peddlers, and watch me strut my stuff.

Yours,
B. Sanderson.

Dear Sir:

May 10, 1929.

Pursuant to your esteemed favor of May 9, we are sending another service man, our Mr. Antony Scavenga. Mr. Scavenga has a nose for finding things and we are sure he will locate the trouble in your Model 13 Hallelujah.

Very truly yours,
David Martin

Of the next group of letters, the sea gave up only four readable fragments. One says: ". . . one hundred and eleven hours service." On another we read: ". . . he'd look good with a banana cart." On each of the others there are single words, "shyster" and "crook."

GERONIMO CITY GAZETTE

Gazette Square
Geronimo City

September 25, 1929.

Mr. Martin:

May 15, 1929.

Your Tony Scavenga was here for five hours yesterday and left the set worse than he found it. The fading is a little better but the b-r-r-r-r-r-p—b-r-r-r-r-r-p—b-r-r-r-r-r-p is much worse. You understand, of course, that you get no payments on this load of junk until it is in first-class working order.

Yours, B. Sanderson.

Dave's Radio Store,
Geronimo City, Ariz.

Attention—David Martin, President

Gentlemen:

A mutual friend, who is both a reader of our paper and a customer at your store, Mr. Bruce Sanderson, has written to us complaining bitterly about a Model 13 Hallelujah radio set which he bought from you more than five months ago. You have so often merited favorable mention in our columns that we feel sure you will continue to do so by adjusting Mr. Sanderson's complaint to his satisfaction.

Very truly yours,
GERONIMO CITY GAZETTE,
Bureau of Mercantile Honesty.

DC/ZA

BETTER BUSINESS BUREAU OF GERONIMO CITY

First National Bank Bldg.
Geronimo City

September 25, 1929.

Sir:

August 10, 1929.

It is true, as per your letter of the 6th, that your so-called service men have spent fifty-five hours on the Model 13 Hallelujah you sold me, but is that my fault? The set still fades and it still goes b-r-r-r-r-r-p—b-r-r-r-r-r-p—b-r-r-r-r-r-p. It still makes funny noises. I want music—not the services of your kitchen mechanics—and I want it right away. Now, what are you going to do about it?

Yours truly,
B. Sanderson.

Mr. David Martin,
Geronimo City, Ariz.,

Dear Sir:

We have a complaint from a resident of Rain-In-The-Face, Mr. Bruce Sanderson, about your alleged business practices. He forwards some letters which, he alleges, are in violation of the U. S. Postal Laws which prohibit fraudulent use of the mails. May we have your reasons for what—Mr. Sanderson alleges—seem to be very unusual business methods?

Yours very truly,
BETTER BUSINESS BUREAU OF GERONIMO CITY,
AW/FT Mercantile Section.

O'BRIEN, LEVY, MULLIGAN and HOROWITZ

Counsellors-at-Law
Geronimo City

September 25, 1929.

Memo from D. W. Blitzen, Ch. Serviceman,
To David Martin, President,

In re: Mr. Bruce Sanderson's Model 13 Hallelujah:

We have put in sixty-five hours service on this set and can find absolutely nothing wrong. He claims trouble is intermittent and shows itself when we aren't there. I think he wants to make his payments intermittent—I'll bet he's behind on them. Complaints nothing but smoke screen.

Blitzen.

August 20, 1929.

Dave's Radio Store,
Geronimo City, Ariz.,

Attention—David Martin, President

Gentlemen:

Our client, Mr. Bruce Sanderson, of Rain-In-The-Face, has instructed us to bring suit against you for \$25,038.50—\$10,000

(Continued on
page 53)

Dear Mr. Sanderson:

Payments on your account are now three months overdue and amount to \$45. Let us have your check please or we shall force collection through our attorneys.

Truly yours,
David Martin.



There are
NO PRETTY PICTURES
With this Article

—neither is it pleasant reading . . . but every dealer, jobber and manufacturer who has his own future and the welfare of his industry at heart, will read it—not once but many times.

The author of this treatise, on the relation of the general policies of radio men to the acceptance of radio paper by the financing companies, heads one of the largest banking houses in the country. This gentleman, in his keen summation of our vulnerable points, has an intimate knowledge of the inner workings of the radio machine; but he has not been so close to its rapidly revolving wheels as to distort his perspective.

YOUR telegram requesting our opinion regarding conditions in the radio field has been received. It is common knowledge that finance companies are operating with radio dealers along more conservative and stricter lines than heretofore. This is the result of conditions which have developed in the field over which they have had little or no control.

We have been imbibing a business philosophy that nothing is impossible; that there is no limit to credit, and that no saturation point in the sale of commodities exists. Today, however, the radio industry suffers from over-production, and the smooth flow of merchandise has been disturbed.

Quota System Criticised

Quotas of sets to be sold is probably the most disturbing factor in the policies of manufacturers. To acquire and hold a distributorship in an area, unless it be factory controlled, necessitates a stipulated volume of sales. The distributor, in co-operation with the factory, controls the dealer franchises, and these are granted to dealers frequently on the basis of large anticipated volume. Following down the line, therefore, the dealer must sell, whether or not there be a demand, in order to maintain his franchise. Such a system encourages sales for sake of sales only, with results to be outlined later.

It has been known that distributors have forced un-ordered sets on dealers, other than ordinary annual quotas, and have threatened the discontinuance of their franchise if the dealers protested. Such a practice certainly builds no good will, and cannot be regarded as conservative.

With volume so uppermost in the minds of manufac-

Frank

tures and distributors as an aim, there has been a tendency to encourage new dealerships with too little regard for the strength and general standing of the dealer. Our experience in investigating the credit standing of dealers has developed a surprisingly large number of instances where the distributors had no financial statement of the dealer in their files, and know too little regarding his situation. It is difficult to conceive of the passing of thousands of dollars of credits under these conditions, but truly the fact remains. The remedy for this is obvious and the encouragement of a better dealer selection would have tremendous benefits.

Bonuses, Price Drops, Dumping

Manufacturers and distributors offer a bonus in the form of an extra discount for volume purchases. This may and does encourage over-extension of inventory on the part of dealers. The dealer who has a fair amount of inventory frequently purchases additional unnecessary inventory in

order to take advantage of the extra discount, and this may be the straw which breaks the camel's back, because in practice it works out that regardless of the circumstances under which a bill of goods is sold, the distributor looks for his money on due date, and becomes disturbed and perhaps distressed in his unsuccessful endeavor to collect the bill although the dealer was oversold in the first place.

It is thought that a constructive step might be taken by manufacturers and distributors protecting dealers in price drops. While this is done in instances, it is by no means universal. On occasions, instead of giving dealers cash credits, they have been in the form of merchandise or accessory credits for future purchases, and for which the dealer may have no use.

Along these same lines, dealers are frequently embarrassed by the dumping of surplus merchandise among price cutting merchants, thus breaking the market in general and jeopardizing the dealer's rightful profit. A closer study of the demands by the manufacturer, and a production schedule planned accordingly, should help to avoid such a situation.

Straight Talk for Dealers

As to the dealer—the finance companies have more intimate association with the dealer than the rest of the factors in radio merchandising, and know their problems particularly. In summary, the following seem to be the subject of criticism:

1. Dealers are under-capitalized. They do not fully appreciate the necessity for a fair amount of money to operate a business successfully. It is a daily occurrence to find in the offices of finance companies individuals

Facts from a Banker

with as little as \$1,500 who are establishing themselves as dealers and are seeking an outlet for their time sales contracts. On paper this type of individual consistently figures large profits and small expenses, and as those of experience know the calculations are a disappointment, almost invariably.

2. Dealers with an already established business in an entirely foreign line frequently run their radio departments as an adjunct. Within an hour of this writing, an application came to us of a newly enfranchised dealer, whose chief interest is a delicatessen store.

3. Experience points to the fact that the dealer organization is primarily a sales unit and particular emphasis is laid on this aspect of the business. Volume has been the indomitable cry, and perhaps they absorb this attitude from the leaders of industry. Little do they appreciate that profits are the results to be looked for at the end of a fiscal period, else they would devote more time to credits and collections.

4. The attitude just outlined frequently results in a business outgrowing its manager and ultimately a lack of system throughout. Budget systems are unknown. No effort is made to prophesy his sales for succeeding months, and hence the dealer cannot know his inventory needs. Definite lines of credit are not established with finance companies, and hence he has no definite plans for outlets for his paper. Service departments are unorganized and are overburdened by reason of faulty installations. These are but a few items in the dealer's lack of efficient organization.

5. Perhaps the weakness which is most noticeable is that the average dealer is woefully careless concerning records of his business. Lacking a wide business experience, it is very difficult for him to appreciate the necessity of bookkeeping records and the justification of its expense. Five hundred dollars annual expense for auditing seems to him entirely out of proportion to the benefit to be gained, although he will deliver two sets worth \$500 to unknown people without hesitation.

Employ a Public Accountant

To correct these faults, we have been urging upon our dealers to employ reputable certified public accountants who will not only review their books, but systematize their operations, and act in a consulting capacity to offer helpful suggestions. A firm of this type would prepare and submit to the dealer monthly balance sheets and profit and loss figures, and, if necessary, interpret them for him.

6. The average dealer does not investigate his purchasers. The fallacy of this is obvious and will not be dwelt upon. Suffice it to say that retailers often "give" their merchandise away with no information concerning the purchaser's ability to pay, and no supplementary information through which the purchaser might be traced if he moved from the address at which the delivery was made. The result is that collections are slow and expensive and the loss ratio too heavy.

7. In my mind canvassing needs the closest of scrutiny.

As employed by the dealer interested primarily in volume, and with a large number of men selling, it is difficult to control the type of business brought in by them. Thus it is that expensive sets will be sold to people who cannot afford them; to the ultimate grief of the dealer. Salesmen of this type are interested particularly in commissions, and if these are paid at the time a sale is consummated, subterfuge is frequently resorted to.

In brief, canvassing too often results in "forced" sales leaving collection difficulties and losses in their trail.

8. Collection systems are inefficient. With dealers not realizing the importance of prompt collection efforts, they are very likely to procrastinate. Some dealers maintain no collection system, and others a hunt-and-find system for locating delinquent accounts. Until a worthwhile due data system is established, their problem is not solved. Any item allowed to run for thirty days makes it that much more difficult to bring up to date because the customer is getting deeper in debt. Here again, the average dealer does not appreciate the necessity for engaging a collector to bring in past due moneys, and its efficacy should be impressed upon them.

For Larger Down Payments

9. Initial payments have had a steady tendency downward. Originally, 25 per cent was demanded, and subsequently, it dropped to 15 per cent, which is customary for a large number of dealers today, particularly those who depend upon a finance company for their outlet. Many today are talking in terms of a 10 per cent down payment, even the \$10 down payment is with us. Experiences in other fields of installment sales should be a lesson to the radio trade. Unless the purchaser has worth-while equity in the commodity, he will value it little, and its loss means nothing to him. I feel, therefore, that a definite change in policy toward larger down payments is inevitable.

10. Dealers sell contracts to too many finance companies. With four and five lines of credit, it is difficult for any one finance company to know the dealer's position and the aggregate of credit extended. The concentration of credit with one or two companies at most would be beneficial.

11. As a result of his eagerness for volume, it is easy for a dealer to over-expand. Branches are opened too early in the lifetime of the business and these prove to be expensive in operation. More than that, it is difficult to find efficient managers and direct control by the proprietor is lost.

The foregoing is not very optimistic, but it is natural in a period of unrest in an industry that we should regard the situation from a critical viewpoint. I fully realize that radio has its place in American industry, and that there are hosts of good points in all of the factors which have not been touched upon in this letter. However, I have tried to give you unstintingly and frankly, without regard to the trespassers, my personal feelings about the present situation, after having given them considerable thought and study.

You, Too, Can Sell Fine

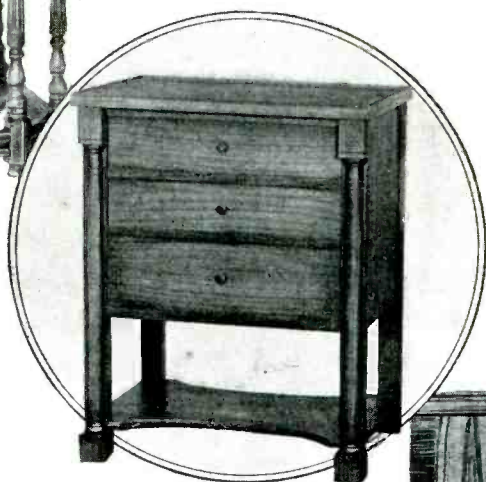
Styles in de luxe cabinets that are finding favor and sales methods that are producing results



(Left) Conservative in line, this model will appeal to the prospect who desires an unusual cabinet of quiet dignity.



(Right) An example of the more ornate console which readily adapts itself to the tastefully decorated home.



(Right) This chest of drawers practically sells itself because it is early American in design and will fit into even the smallest nook or corner.



(Left) Of modernistic conception, this piece is simple in design while retaining the spirit of the mode.

DON'T deceive yourself. The discriminating prospect is just as interested in quality radio furniture today as ever."

In this forcible language, the manager of a Fifth Avenue radio music house, whose name is known throughout the country, expressed himself to me the other day. His opinion was shared by five other progressive dealers who are featuring de luxe cabinets.

What then of the methods to use, and what of the character of the stock to carry?

There is nothing complicated about selling fine furniture, provided the stage has been properly set. Naturally, the store must be well kept and attractive—the cabinets of more or less conservative design and moderately priced. However, contrary to expectations, you need not be located in the heart of a high-priced neighborhood. One of the surprising revelations in my recent survey was that chain radio stores and certain individually-owned businesses were selling the major part of the specially designed consoles to so-called "foreigners" located in the fringe districts of New York City. On the other hand, the Fifth Avenue stores were drawing an equally profitable trade from the "400." It was purely a case of presentation—of knowing their clientele and how to appeal to them.

Every city and town, no matter what the size, has its Fifth Avenue and its exclusive section. As a beginning, sell a special job to one of your town's "best people," then use that as the wedge to open the door to more fine furniture business. When Mrs. Lotta Money sees Mrs. Getrich's new period cabinet at the weekly bridge, she will haunt hubby until she has

one, too. Where will she buy it? Where Mrs. Getrich purchased hers, of course. You will find selling special furniture like playing tenpins, if you hit the king pin the rest fall easily.

A well-known radio-music house, with eight branches in various parts of the city, sells practically all its

Furniture

By
Thelma H.
Purinton



The vogue with Fifth and Park Avenues just now is the commode. It blends harmoniously with the artistic interior without disclosing its utilitarian side.

special cabinets by having the chassis already installed. In this way the customer buys the console as he sees it; doing away with indecision as to whether he would like a "Fina-tone" chassis in this cabinet or possibly a "Clarion" in that cabinet. Of course, each chassis is available in several styles of cabinet, but having them on display as an ensemble does away with much sales resistance. Incidentally, with these methods, 20% of the sales are de luxe cabinet jobs.

"Is it necessary to carry a large stock?" is one of the first questions the dealer will ask. Usually not. For a small dealer probably two models would suffice—one rather conservative in design and the other more ornate. Of course, the larger retailer could carry a more extensive assortment.

One store in the heart of a well-to-do section in uptown New York, a chain store by the way, circularizes his neighborhood with mailing pieces offering to "modernize your radio set by installing it in a period cabinet." This is an unusually good appeal, as many hesitate to part with their pet radio but would like to dress it up in a period cabinet.

Another dealer revamps the console from which the chassis has been removed. In this way, the discarded cabinets are put to good use and do not represent a total loss.

Still another shop finds it profitable to order a special

cabinet made after its own design, concentrating on this model in its advertising which runs something like this, "Exclusive with ——. A cabinet you will find here only."

WITHOUT doubt, the most widely sought console is the highboy of simple design with simulated hand carving or the more elaborate and ornate model, generously carved and embellished with inlays. Just now *the* cabinet which the better type prospect is buying is the commode.

Something else quite new is the small Colonial chest of drawers with the set concealed behind two false drawers.

The modernistic period, thought at first to be a fad which would not survive, has now been given a real position in furniture land. The new consoles in this mode are not as unusual as the first pieces. The lines are simple and angular but at the same time artistic.

Have a characteristic highboy in stock and one other style, possibly a lowboy, low console or chest of drawers, together with a set of good photos showing other models available, along similar lines so that the prospect may easily visualize them—then talk fine furniture with every sale. You will be gratified with the results. The client you least thought would be susceptible, according to these champions of special cabinet business, may buy your choicest period console.

He went after a

WILLIAM BARROW, JR.,
at the control board of the radio system in the principal's office.



IN THE new high school at Great Neck, Long Island, stands a monument to the initiative and ambition of William Barrow, Jr., Stromberg-Carlson dealer in that territory. Not that the school board actually voted that a likeness of this enterprising merchant be erected within the walls of their modern institution of learning; but, heeding his suggestion and sales argument, they have incorporated in the building a complete radio program system that will not only prove exceedingly valuable as a means of instruction, but also will remain as a tribute to the business ability and progressiveness of this up-to-date radio dealer.

When plans for the construction of this new school were under way, Barrow was foresighted enough to see the possibility of selling the board on the idea of a radio installation for every classroom. Armed with his argument in favor of radio as a modern means of education, he visited first, not the school board, but the architect who was drawing up plans for the building and convinced him that the installation would be a fine thing for the contemplated building.

Having met with success thus far, the next step was to present the matter before the board to see if they were receptive. After convincing selling arguments and demonstrations calculated to prove the value of such a system, the board was won over to the degree that it demanded the best that could be obtained.

The way was clear now for Barrow and he might have made the fatal error of attempting, with limited facilities and the haphazard purchase of doubtful equipment, to

make the installation unaided. Instead, he exhibited the common-sense which marked his plan of campaign from the beginning and consulted with factory engineers.

Estimates and engineering specifications were prepared immediately by the Rochester manufacturer and were submitted, along with other electrical specifications, to the architect. So complete and accurate were these estimates, that they were approved with but a few minor changes.

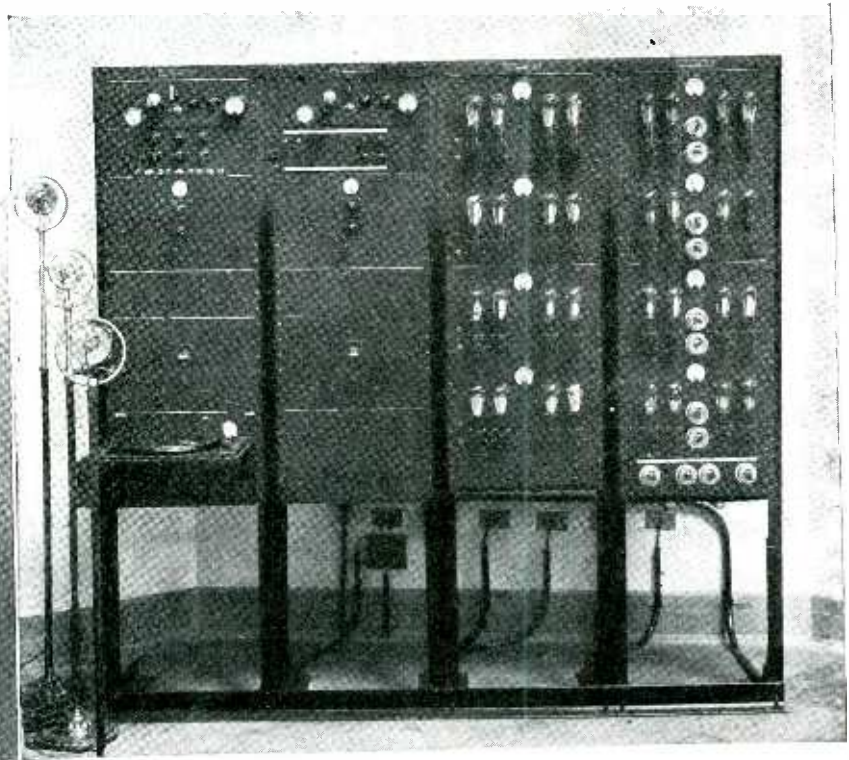
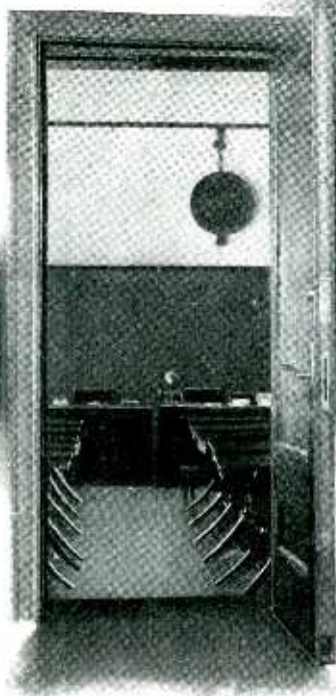
Due to the fact that contractors are naturally unfamiliar with this sort of work, it was thought best that the installation be made under the supervision of the factory installation engineer, provision for this man's services being made in the estimate.

EACH of the school's forty-four class rooms is equipped with a magnetic type loudspeaker and a volume control to permit adjustment of sound level. Two banks of electro-dynamic speakers, three in each bank are installed in the organ lofts of the auditorium. Another dynamic speaker, mounted on a baffle-board on wheels is located in the lunchroom. This latter speaker, can be moved from point to point within the building or out upon the grounds if desired.

A two-channel system is provided in the installation with separate switches for each class room on a panel-board located in the principal's office. This arrangement permits radio or phonograph music to be delivered to certain class rooms while the principal may address others through the microphone on his desk.

School Installation — and Got It

There are legions of schools waiting for \$9,000 installations like the one described here



Above, the amplifier panel and the phonograph turntable; 64 tubes are used.

Left, typical classroom showing a speaker on the wall. The volume control is located beneath. There are 44 such installations throughout the school.

Eight socket-power units and power amplifiers comprise the amplifying equipment while three microphones, two receiving sets and a phonograph turntable with electric-magnetic pick-up constitute the originating equipment. Both sections employ a total of 64 tubes. Because six power speakers are employed in the auditorium, sound distribution in this room is as near perfect as it is possible to secure.

The installation completed, Barrow's work resolves itself into a servicing proposition which he hopes will eventually develop into periodical inspections on a retainer basis. In the meantime, he is not resting on his laurels but finds time, in addition to his activities in retailing, to investigate possibilities for similar jobs.

"Installations of this kind," he advises brother dealers,

"are an excellent means for adding respectable sums to the storekeeper's profits. They present a particularly valuable field because most of the school work is contracted for in the spring for installation during the vacation months, a time of the year when the radio dealer's activities are at their lowest mark. All work being completed by August, the dealer is again free to concentrate on local sales.

"I found from my experience with this particular installation that there was far less detail than I had anticipated. Estimates and equipment were furnished by the Stromberg-Carlson Company and the actual installation was made by a local contractor under the supervision of the company's engineer.

"Properly handled, installations of this type provide merely a selling problem for the dealer. Once he convinces the parties interested, his worries are over and he has netted a nice profit and an important service account. To me it proved an excellent proposition and well worth the effort spent in putting it over."

Screen Grid Circuits *and*



Electric PICK-UPS

When the screen grid tube was introduced it presented certain problems in the use of phonograph pick-ups. This article explains what they are and how to overcome them

By **Virgil M. Graham**

*Radio Engineer
Stromberg-Carlson Telephone Manufacturing Co.
Rochester, N. Y.*

FOR the last few years, manufacturers of high-grade radio receivers have been providing means for using their excellent audio systems in conjunction with magnetic phonograph pick-ups. Such a combination with a good pick-up gives unusually fine reproduction of the new electric-cut records.

The receivers in which this improvement was pioneered, were equipped with a jack so wired that when the plug of the pick-up outfit was inserted the primary of the first audio transformer was disconnected from the detector circuit and connected to the pick-up. Such an arrangement is shown in Fig. 1. This, of course, gave two stages of amplification for the output of the pick-up.

The pick-up outfits used with these receivers employed a "high impedance" pick-up head, a scratch filter, and a volume control. The scratch filter consisted of a capacitor and inductor in series, the whole being connected directly across the output of the pick-up head. The values of the elements of the scratch filter were chosen so as to cut off the "scratch" frequencies without impairing appreciably the useful audio range up to 5,000

cycles. The volume control was a high resistance potentiometer (or variable voltage divider, see Fig. 2), the resistance unit of which was connected with the scratch filter across the output of the head. The output from the volume control was, therefore, obtained from the movable contact of the potentiometer, and the "ground" side of the resistance unit.

This same type of pick-up outfit was used with various adapters which connected the terminals across the detector grid and filament. This arrangement, of course, gave three stages of amplification after the pick-up. However, in this arrangement no coupling transformer was used between the pick-up and detector tube.

After the first season of using jack type pick-up connections which required that the plug be inserted when phonograph operation was desired, it appeared that greater convenience to the user could be supplied in the form of a phonograph-radio switch which would allow the pick-up outfit to be permanently connected to the receiver. The first example of this arrangement was a combination of this switch with the volume control, operating both with the same knob. The pick-up outfit was connected in the circuit by turning this volume control knob completely "off" at which position a cam switch was operated. More recently receivers have been equipped with a similar arrangement on the station selector control, so that phonograph operation was secured by turning this control to one extreme of the selector range.

SO FAR we have been concerned with receivers employing "low voltage" detectors and two stages of audio amplification, receivers which also had relatively low radio amplification. Now, with the advent of screen-grid receivers, particularly those using these new tubes to their utmost advantage, we are confronted with new problems. The use of three screen grid tubes as radio amplifiers gives high radio amplification sufficient to

allow the operation of a high voltage or power detector. The output of such a detector is sufficient to operate the audio power output stage directly (except in some cases where push-pull is used).

At the same time as the advent of the screen-grid receiver the "low impedance" pick-up with a considerably more flexible armature was brought out. This pick-up gives better response on low frequencies and also greater record life. The outfit using this type of pick-up, consists of a volume control (low resistance) potentiometer connected directly across the pick-up, as shown in Fig. 3, and an input transformer of high turns ratio (60:1). This transformer was of the proper impedance ratio to couple the pick-up to the grid of an amplifier tube. The scratch filter of such an outfit was simply a small capacitor connected across the secondary of the transformer. As the capacity across the secondary winding was, therefore, critical it was essential that this transformer be placed near the receiver, thus keeping the connecting cord short. To do this the long cord usually provided for a pick-up outfit was placed between the input transformer and the volume control pick-up head unit, thereby keeping the long cord in the low impedance side of the circuit where the effect of capacity of the cord was not appreciable.

While this pick-up outfit used relatively high voltage output it still needed two stages of amplification to give necessary speaker volume. Therefore, with the above mentioned receiver where the power output stage was fed directly from the detector, it became necessary to connect the pick-up outfit to the grid of the detector. This in itself sounds simple, but in practice it meant considerable difficulty. The power detector was, of course, of the grid bias type. The radio amplification was, as stated above, very high, so that any switching arrangement used must be so arranged that inter-stage coupling, and resultant instability, would not be caused. Likewise, such switching equipment must not add very much to the minimum capacity of the detector tuning circuit as this would cause difficulty in aligning this stage to track with the other tuning stages.

WHEN this problem was first attacked, the proper procedure seemed to be to put in a switch which would transfer the grid connection of the detector tube from the "high side" of the tuned circuit to the pick-up connection and vice versa. It was soon found, however, that such a switch would be very difficult to build with proper insulation and low capacity. Obviously the desirable arrangement was one in which there would be only one "make" contact to connect the pick-up for operation.

The solution finally arrived at was very near to this ideal. It can be readily seen that in its original form the power detector circuit could not have the pick-up outfit connected directly across its grid and "ground," as the pick-up would then be shorted by the tuning inductance. This difficulty was overcome by connecting a grid capacitor, with a grid leak shunting it, in series with the grid as illustrated in Fig. 4. This addition did not affect the operation of the grid bias power detector, and it allowed the "high" side of the pick-up circuit to be connected directly to the grid without the shortening effect of the tuning inductance. The "low" side of the pick-up circuit was connected as usual to the "ground" or frame of the receiver.

The grid leak used interposed enough resistance in series with tuning inductance shunting the pick-up to re-

duce the effect of this shunt to a negligible value. The grid capacitor became a shunting capacitor for the secondary of the pick-up input transformer. The value of this capacitor was accordingly made of such value as to act as a scratch filter for the pick-up outfit designed for use with the receiver.

The cam switch used had one insulated stationary contact which was connected to the detector grid, one moving contact which was connected to the pick-up outfit.

(Please turn to page 57)

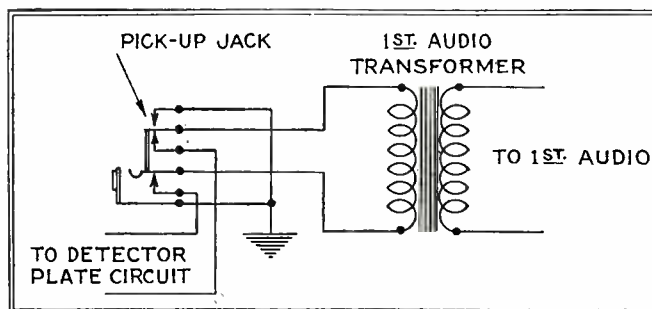


FIG. 1—Original arrangement of connecting high impedance type magnetic pick-up to the primary of the first audio transformer.

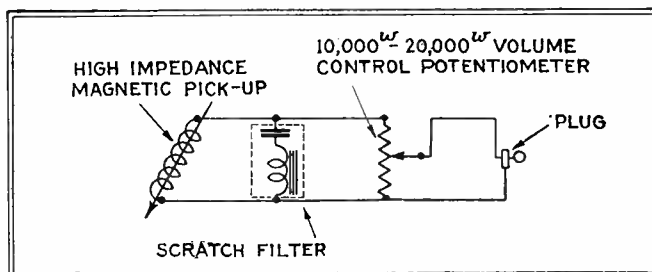


FIG. 2—Showing the circuit of a high impedance type magnetic pick-up outfit.

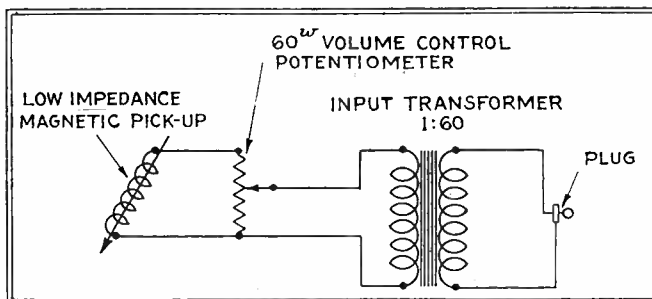


FIG. 3—This shows the circuit of a low impedance type of magnetic pick-up.

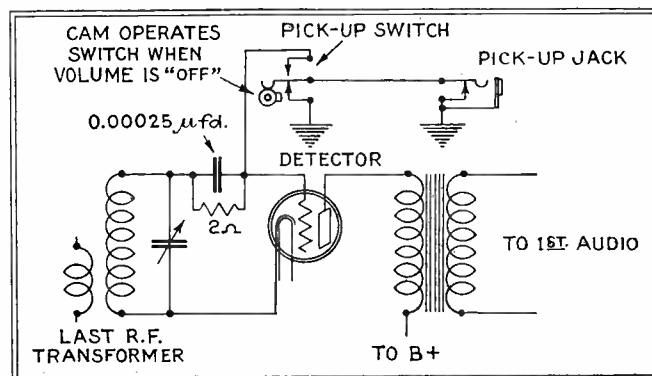
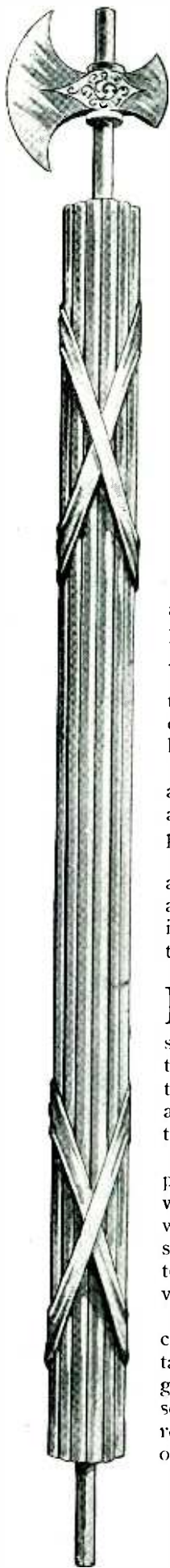


FIG. 4—Here we have the connections of the pick-up switch and jack for using a low impedance pick-up outfit with a power detector.



Read It!

An attorney's advice on "agency" contracts

By Leslie Childs

Counsellor at Law



ONE of the best ways for a retail merchant to let himself in for a lot of trouble is to sign some kind of contract of purchase "as a matter of form."

Propositions of this character are usually presented by traveling agents, who purport to represent some distant concern just entering the territory.

Subjects of sale in this field range all the way from needles and pins to traction engines, and any retail merchant, regardless of his line, may be approached.

The sales talk is based upon the advisability of stocking the articles involved as a side line, and glowing pictures of prospective profits are presented.

The dealer is told that he is merely to act as the local agent of the selling firm, and that if the merchandise doesn't move it may be shipped back, without any cost to him.

HAVING reached this point the "traveling representative" presents some sort of written document for the dealer to sign. He insists that the execution of this document is a mere matter of form, an act of good faith on his part, etc.—but there's a catch, and a serious one.

For if he accepts, the merchant is completely overlooking the fact that no matter what the representative may have said, the writing as signed is what counts. If the seller sues on the written contract, its terms will govern, regardless of any verbal agreement.

In one case of this kind, a radio merchant signed a contract (which also contained notes) for a bill of goods. The goods did not sell, and the merchant sought to return them. The selling firm refused to accept their return and sued on the notes.

The merchant countered with the claim

that the salesman of the selling firm had assured him that the contract was not one of sale, but one of *agency*; that if the goods did not sell they could be returned, and the contract and notes, signed "as a matter of form," would be returned and the deal called off. Did the merchant get anywhere with this? The Court said:

"WE DO not think the testimony is sufficient to sustain the claim of fraud. A business man, who discusses a transaction for several hours with an agent, and then deliberately signs the contract and notes, ought not be heard say that he did not understand so plain a transaction, and that an oral understanding had contemporaneously with the written contract may be shown to contradict the written contract."

The merchant was held liable on the notes, and the fact that he relied on the sales talk of the seller's agent to acquaint him with the terms of the agreement got him nowhere in court. Needless to say, *the great majority of these cases arise simply through the failure of the buying merchant to take time to examine written contracts before signing them.*

The object of all this is by no means to discourage the buying of goods through the medium of written contracts and notes, for in essence any order for goods that is accepted amounts to a contract. It follows that when the retail merchant knows he is dealing with a reputable firm he has little to fear from trick contracts or unreliable salesmen.

But since high pressure sales schemes are almost without exception put over through the medium of written contracts, a retail merchant should exercise a little extra caution in making transactions of this kind. *Read it—and forget what was merely said.*

Final 1929 Figures and 1930 Forecast

Radio volume for fourth quarter, last year, exceeded expectations—Healthy increase in set and tube business predicted

THE actual records covering the last quarter's business in sets, parts and accessories show but slight variance from *Radio Retailing's* preliminary estimate published in its January issue—and this in the right direction, upward.

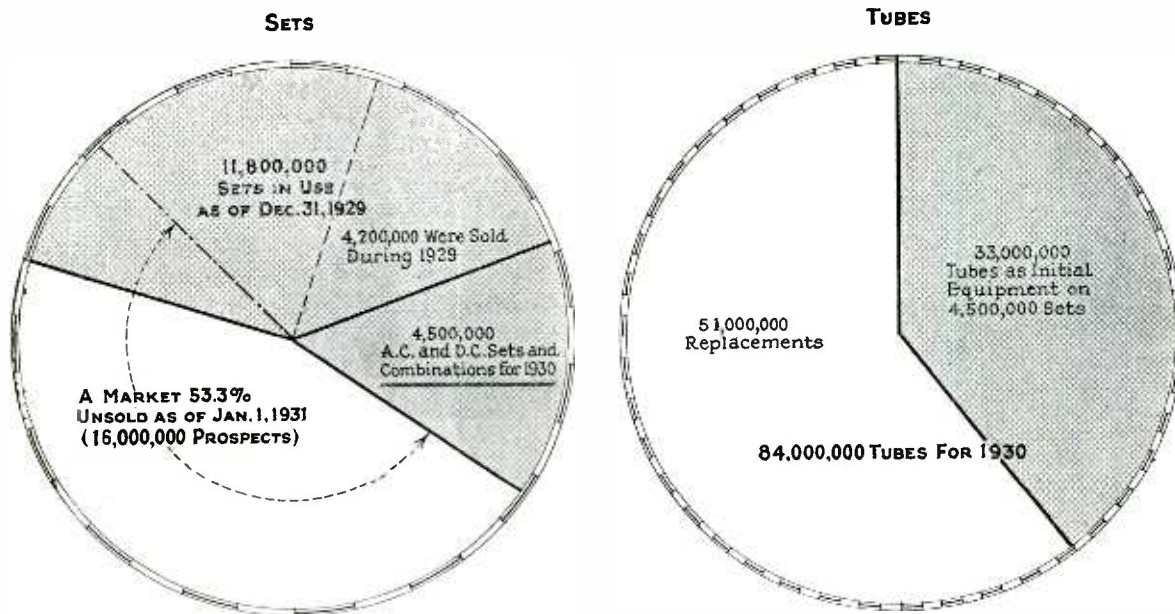
Receivers, in unit sales, were 7.7 per cent over the initial figures and represented, at retail sales value, \$525,000,000—not including combinations. Actual tubes consumed, all types, were 69,000,000 (\$172,500,000 gross figured at an average of \$2.50 apiece).

The total actual sale of radio products for home use was \$842,548,000—less than 5 per cent from the January estimate of \$805,328,000.

The following statistics confirm, therefore, our statement of two months ago that 1929 witnessed a radio business substantially ahead of the preceding year.

So much for the past. Because of the earnest desire throughout the entire industry to match, in the future, production and sales plans with actual demand, the two additional statistical presentations on this page will be of unusual interest. The probable demand for receivers and tubes, as represented on the accompanying graphs, is based on the encouraging attitude of the public, as a whole, toward radio equipment throughout January and February, as well as on the experienced opinions of close observers within the radio industry.

1930 HOLDS THIS PROMISE



These estimates are based on a total of 30,000,000 families or individuals in the United States who are interested in radio.

1929 Radio Sales, at Retail Prices

Item	Units and Dollars	Item	Dollars
Radio Sets, factory-built (89% include consoles and built-in reproducers).....	4,200,000 \$525,000,000	Storage (A) Batteries, Chargers and Socket Power Units.....	\$14,350,000
Radio - Phonographs (Combinations).....	238,000 67,068,000	Other Accessories.....	9,600,000
Tubes, all types.....	69,000,000 172,500,000	Parts (Direct to Consumer).....	7,500,000
Reproducers (Exclusive of 3,689,000 sold with sets and combinations).....	800,000 16,000,000	Totals	
B-C (Dry) Batteries.....	30,530,000	Sets, plus Combinations.....	592,068,000
		Parts.....	7,500,000
		Accessories.....	242,980,000
		Total Sales for 1929.....	\$842,548,000



He Uses the Telephone

AT LATHROP, OHIO, J. H. Mead is selling radio service to farmers by using his telephone. This dealer believes in the old maxim of killing two birds with one stone, and, when customers call him into a rural district he makes the telephone furnish enough extra business to pay the cost of the trip.

"We serve a large rural territory," Mead explained. "And calls often come in from farmers living six miles distant. Many of these trips are expensive, especially in the winter season when roads are bad, but last year we found a way to make each trip show a profit.

"Experience taught us that most farmers have telephones, and many of them radios. The local telephone exchange furnished us with the numbers of these rural folks. This list was placed on file in our store. Now, when we are notified of a service job in any part of our field, I telephone each farmer along the route and ask how his radio is working. Many times the reply comes back that the set is out of condition. I then explain that our service truck will pass his home at a certain hour, and in the majority of cases we get a request to make an inspection. The truck then goes out, loaded with necessary equipment. While many of the radios are not of our line, we usually are able to put them back into use. This plan enables us to service several sets on one call. We are also brought in touch with folks from every part of the district, and our books are thus kept supplied with fresh names.

"We find the telephone a business-builder at all seasons. It is quite inexpensive, and many miles of good territory can be easily covered with it in a few minutes time."

Motorcycle Deliveries Make Lasting Impression

Fast and dependable service means a lot to a customer. The Howard Radio Shoppe knows the road to future business well so they use this motorcycle to give super-service to customers. Aside from its value as a quick and inexpensive method of delivery this outfit, driven by a neatly uniformed man, is an excellent advertising medium, letting the world know that Howard's service is prompt and efficient.



Sales

*Why not send us that dollar
send you a check*

Coffee Puts Radio in Schools

AN INTERESTING and successful promotion idea in connection with radio in the school has begun to show gratifying results through the effective co-operation of Reinhard Brothers Company, Inc., Atwater Kent radio distributors in Minnesota and North Dakota, and the Nash Coffee Company. Radio sets have been installed in schools in several towns throughout the last few months at no cost to the schools, and the sales volume of the Nash Company has substantially increased in the same territories.

The idea is this: about a year ago, the Nash Coffee Company of Minneapolis inserted coupons in each coffee can and requested that children save these coupons, turn them into their school and after a certain number had been collected, the school was entitled to an Atwater Kent radio, purchased by the Nash Company and given to the school.

Reinhard Brothers report that they are receiving orders for school installation from the Nash Company on the average of one school per week. During the first week in January alone there were approximately 40 schools furnished with sets.

As a further example of the success of this promotion campaign, five receivers have been installed in the little town of Crookston, Minn.

A particularly human sidelight on the school installations is gained through reading scores of letters written by individual school children and entire classes to Reinhard Brothers and the Nash Company, telling in a childish and sincere way, the great enjoyment they obtained by having radio in their school.

Another Way to Get a Down Payment

"WE have solved the home demonstration problem as follows," says G. L. Worthington, general manager of the Peninsular Radio, Inc., St. Petersburg, Fla. "A customer comes in our store and selects the particular set he likes. We explain that in order to give a home demonstration a charge of \$5 is made. For this sum the prospect is given a first-class antenna installation and the set left for ten days. After the second day, a salesman calls and talks sale. He follows this procedure at regular intervals during the ten-day period. At the expiration of this time, the sale is either closed or the set is returned.

"We have found after a careful check that the average sale is made at the end of the second day. If the sale is not made we have been partially reimbursed for the use of the radio and the customer has an aerial to show for his five dollars. This has eliminated the so-called joy riders.

"Since inaugurating the \$5 deposit plan our demonstrations have increased and our percentage of sales is running nine sales out of every ten demonstrations. Once we have the \$5 the prospect is half sold, and the closing is easily accomplished due to the fact that we have a hold on the customer."

Tell Us What You Did

"It rings true. Why I knew a fellow—." Do you feel like saying this when you read some article on this page? Jot down your experiences, send them in. For sales ideas must happen, cannot be imagined.

Radio Retailing, March, 1930

Ideas

*pulling idea today so we can
for five dollars?*

"Chicken-Eating Contest"

AN ORIGINAL and humorous publicity campaign secured a large and valuable prospect list for the Broyles Electric Co., Marion, Ind.

Co-operating with the local newspapers and a local theater, a great deal of advance notice was given to a unique "chicken-eating contest." Two teams of chickens, one white and one black, were displayed in the Broyles window along with an effective radio display. The contest was held on the stage of the theater to see which of the two teams could eat the greatest number of grains of corn in three minutes.

Radio Studio for Demonstrations

ARADIO shop arranged as a "studio," reproducing the atmosphere of the home, proves a valuable aid to convincing demonstrations. The prospect who enters the Braun Radio Store in Baltimore, Md., is given a demonstration amidst surroundings which are not only consciously made pleasant and homelike, but which are scientifically constructed so as to present every possible acoustical advantage.

Using Civic Pride to Sell More Sets

"EVERY school in Memphis should have a radio set—and I'll donate them, if the public will co-operate."

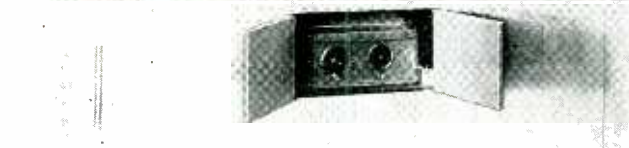
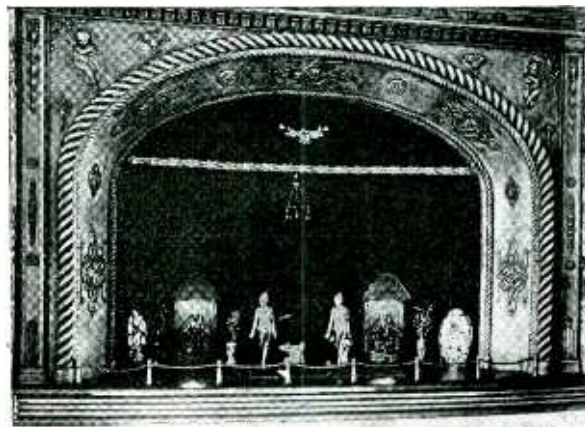
This announcement of E. Z. Adams, proprietor of the Adams Radio Company, Memphis, Tenn., drew the attention of every really public spirited resident of the city.

And Mr. Adams kept his word. For every ten sets that were sold from his store, he gave a set to the public schools, entirely free of charge. People who were contemplating purchases of radios made them from the Adams company, so that they might help the local schools. The buyers had nothing to lose, and they were put in a position to help a good cause with little effort; thus the enterprising retailer turned the steps of all the radio prospects in town toward his store.

How They Make Time Sales In China

"HERE is a sales idea," says Liu E. Lo, Shanghai, China, "which was suggested by me to a radio dealer, who tried it with good results."

A salesman was sent to visit as many doctors in town as were known to be giving treatment by means of electrical apparatus. He offered to install for them electric time switches to turn their machines on or off at predetermined times. As most of such machines as diathermy, heliotherapy, sun-light ray, infra-red ray, X-ray, and the like, when in operation, require the attendance of an assistant for turning them off at the proper moment, such a switch saves much of their time, if not the services of assistants, too. Although the salesman was authorized to give a discount, if necessary, of the 49 doctors visited three readily accepted the offer without any discount, and twelve had the switches installed on trial. Of these twelve, seven were sold at 10 per cent discount. In all cases, the doctors were requested to supply the names and addresses of their clients who might be interested in possessing a radio set—which they did gladly—and in all cases the name of the dealer was engraved on the clock of the switch in big letters. Most of such doctors' clients were rich or, at least, well-to-do. Soon the dealer was called upon to install such switches (and in one case, a radio set, also) in hospitals. These installations secured for the dealer not only lead to good prospects, but also a no-cost permanent advertisement in a desirable community.



Providence Man Puts Radio In Stage Setting

Editors Note—Perhaps some enterprising dealer can adapt the following idea to a window display which would, without a doubt, attract attention.

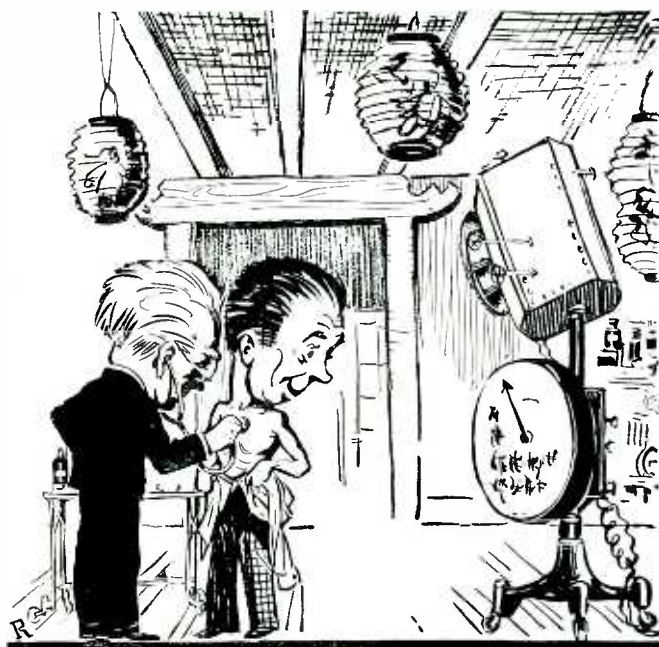
PERHAPS as a forerunner of the type of radio settings of the future, John L. Cary, Providence, R. I., has gained a very realistic effect from his radio by building a model stage setting. As Cary settles back in his easy chair, the radio broadcasts come to him as from a real stage, and as he looks, he sees not the sign of the radio set, but instead a stage complete with trimmings, ornaments and figures.

The stage itself is four feet high and nearly six feet across. The stage floor is covered with linoleum with a small oriental rug being used over one portion. In the background are two Egyptian maidens, seated under bronze canopies, each made visible by means of small overhead lights.

Much of the setting is made of stucco, wood, rope and papier maché, so blended and used as to look like ornamental plaster. A 1½ inch rope, nailed to the frame, shellacked and painted, serves as the border of the arch.

The setting is finished in old ivory with shades of brown, lighted by indirect fixtures placed at the top and sides.

One of Cary's aims in building this elaborate setting, besides making the broadcasts more realistic, was to be ready for television. He now points out that, if picture radios come on the market, he has only to add a screen to his stage setting and he will have the pictures in a very realistic manner.



Get the

[Timely advice to dealers and jobbers]
[from an authority on this subject.]

Credit Facts

PRESERVE IN PERMANENT READY REFERENCE FILE

Electrical Credit Association, Central Division,

IF SERIAL SEQUENCE IS BROKEN SEND FOR DUPLICATE OF MISSING LETTER.

CHICAGO CHAPTER MEETING Dec 22, 29

NAME Jones Radio Co. ADDRESS Medina, Ind.

A-Discount	E-C.O.D.	K-Notes Secured	O-Refused C. O. D.
B-Prompt	F-C.I.A.	L-Unjust Claims	P-Gyps Discount
C-Slow-Good	G-Gives Notice	M-Col. By Atty	Q-N. S. F. Check
D-Slow-Bad	H-A/C Secured	N-First Order	R-Skipped

MEMBER REPORT 'G	PERIOD SOLD	HIGH R CREDIT	OWES OPEN	OWES-NOTES	PAST D OPEN	PAST D -NOTES	PAYS	REMARKS
19	1929		\$551	\$600	90d	7mo	D	M
23	June Dec.		\$630		120d		C	P
10	Aug. Dec.		\$180		100d		C	R

Credit data sheet on which is recorded, by each attending jobber, the financial status of delinquents.

INABILITY to evaluate the true credit capacity of the average customer is responsible for most of the altogether too many bad accounts now cluttering the books of practically every dealer and jobber in the radio business. "This is the time of year when credit accounts require the closest watching," says Charles S. Himmel, general manager of the Hudson-Ross Company, a prominent Chicago jobber. Mr. Himmel has an experience of seven years in the radio business. He is chairman of the Radio Jobbers Division, Chicago Chapter, Electrical Credit Association.

"Available methods for gaging accurately the credit responsibility of the prospective or active purchaser are, from the dealer and jobber viewpoint, somewhat dissimilar. It is necessary, therefore, to discuss them separately," he declares and continues: "An analysis of the asset and liability statements of over 200 radio dealers who have found themselves in hot water, and personal discussions with scores of well meaning retailers, show that their uncollectable open account losses range from \$300 to \$1,200, frequently with a time paper loss of equal amount. I am convinced that most dealers do not obtain from the customer proper references and, what is more to the point, that they do not consult the references given them to the extent of obtaining a complete and correct background of the moral and financial adequacy of each and every applicant for credit.

"Second, dealers should insist on prompt payments. They should require a satisfactory explanation of non-payment within five days from the past due date on each payment.

"Third, dealers must have the courage to jump into definite action the minute an account is 30 days overdue. They should get the money, an honest and satisfactory explanation, or, if necessary, sue or replevin the set.

JOBBERS SHOULD CO-OPERATE

"While the jobber's method of procedure with his dealer accounts must necessarily be somewhat less drastic there are specific reasons why he should exercise the utmost caution in granting credit and in watching the business progress of each client. He is in a position to obtain monthly, or even bi-monthly, information covering the financial status of his dealers if he will but organize to this end. By obtaining this information *in time* he can not only secure his own house against serious losses, but oftentimes is able to help the delinquent dealer out of an embarrassing position to the mutual advantage of both parties. I refer to a system of radio jobber co-operation with fellow jobbers which is working here in Chicago in a very satisfactory manner. The set-up is about as follows:

"Twice a month the 52 radio jobbers in our organization compare credit notes. When a dealer account is found to be over-extended or where it is evident that a dealer is falling behind in his financial obligations, a committee is appointed to talk over the situation frankly with this dealer for the mutual protection of all parties involved. Frequently we are able to help him. Sometimes we recommend that he liquidate. Again it may be agreed that he had better return his stock to its original owners and call it a day.

"I feel very strongly that, particularly in the radio business, this type of co-operative jobber action is necessary because of the seasonable nature of the industry. Further, it is not a difficult matter for a dealer to over-extend his credit by opening accounts with a series of wholesalers each of whom, without this clearing house system of credit exchange information, believes that the capital structure statement of the dealer warrants the credit extension granted.

"In conclusion I cannot but feel that a further extension of this policy of alert watchfulness, on the part of both members of radio's distribution chain, would be one of the healthiest elements that we could interject into the industry at this particular time. While drastic measures may seem hard to enforce, in the long run the debtor, as well as the creditor, will profit by it."

It Costs

\$13.43 for Every Home Demonstration

RADIO RETAILING'S *dealer survey reveals significant expense facts concerning a widespread selling policy*

That
Doesn't "JELL"

EVERY home demonstration that fails to sell a set costs the dealer \$13.43!

Surprising, isn't it? Or are you one of that growing group who now realize that "free" home demonstrations are far from free—to the dealer?

To answer the queries of dealers who want to know the facts about their business, *Radio Retailing* asked 1,000 radio merchants for an itemized account of the expense involved in an ordinary home demonstration. The tabulated answers gave average figures on labor, material, and transportation costs, and on losses due to breakage, depreciation and interest on investment.

A few dealers didn't bother to present each item of expense, but made an estimate of the total cost. *The average "guess" of this kind was 300 per cent too low.*

More items enter into demonstration costs than most dealers realize; each item is larger than it seems at first thought. The itemized figures, obtained for the first time, show clearly why many dealers have discontinued the giving of home demonstrations, and why many others, believing in the necessity of this sales method,

have guarded themselves against undue losses by charging for each demonstration.

If a sale is made the average demonstration expense is \$4.51. This lower figure is due to the fact that, by selling the set, the merchant is saved the cost of bringing it back to the store and reconditioning it, and also the loss sustained through depreciation and possible breakage of set and tubes.

This \$4.51, the cost when a sale is made, is legitimate, unavoidable sales expense. But \$13.43 thrown to the winds, with the set back on the floor and a prospect lost, probably for good, is a serious waste. Those dealers who charge from \$5 to \$10 for each demonstration are protecting themselves wisely. In case the sale is made the charge can be applied on the price of the set.

These unexpectedly high figures call for remedial action. Look them over carefully, and see what costs are there that you hadn't thought of. This information gives you a valuable sales tool. Gage your prospect's degree of "liveness;" then ask yourself: "Can I afford to risk \$14 on this one?"

How the Costs of Demonstrating Mount

1. Getting the Set Into the Prospect's Home

Delivery car	\$.80
Two men's time	1.57
Installation expense	2.14

Your sales expense if the prospect buys \$4.51

2. Taking the Set Back if No Sale Is Made

Delivery car	\$.80
Two men's time	1.06
Material used or left	1.07
Total	\$2.93

3. Reconditioning and Depreciation

Polishing, repairing, etc.	\$1.32
Depreciation of set	2.97
Depreciation of tubes	1.70
Total	\$5.99

Total cost of demonstration, if no sale is made \$13.43

4. Additional Expense and Inconvenience

Average number of days set is out of store	4.9
Average number of calls made to home	2.8
Average number of hours of store time spent	1.9

War Declared

Sell the Tube Replacement Idea

BECAUSE tubes continue to glow long after they have outlived their topnotch efficiency, they are used long beyond their span of effective life.

The radio merchandiser should sell the idea of replacing radio tubes after 1,000 hours of service, just as the spark plug manufacturer sells the idea of changing spark plugs every 10,000 miles. In the case of the automobile, the sluggishness due to worn plugs is readily apparent to the car owner, but in the case of the radio set, weak tubes fail to impress the listener in the absence of a basis of comparison. However, if the set owner is provided with a complete layout of fresh tubes, the contrast is immediately apparent and a sale of new tubes is sure to be made.

The active dealer, through his service man, will do well to demonstrate to his customers how tubes become worn by constant use. A thousand hours represents six months or less of radio entertainment in the average household today. Each radio set owner should be a customer for at least two sets of radio tubes a year.

Automotive-Radio and the Lawmakers

WHETHER legislatures are likely to pounce on the new automobile-radio combination, and blot out a new market for millions of sets with hasty, ill-timed laws, depends largely on the watchful vigilance of organized members of the radio industry.

Massachusetts, the state which so feverishly hung a taboo on the automobile spotlight, has already ruled

through its registrar of motor vehicles, George A. Parker, that no radio-equipped car will be allowed to operate. It is rumored that New Hampshire is taking similar steps. "The Massachusetts ruling has no permanent backing by legislation, however," says Frank V. Goodman, radio sales manager of the American Bosch Company, of Springfield, Mass.

The peg on which any legislation would be hung is the supposed peril to drivers. Charmed by a sweet concert, it is reasoned that they will cease to pay attention to the road and permit their cars to imperil the traffic.

Experience tests by the K-B Auto Radio Laboratories, Chicago, have shown that a properly tuned radio set is audible only to passengers in the car, and does not distract the driver's attention any more than shifting the gears or manipulating the choke.

By a prompt appeal to the public, and to state officials, a fair hearing of the automobile-radio question can be obtained, and tests insured which will bear out the merits of the case. A majority of the car manufacturers are with the radio industry in their interest in the matter.

Regardless of what these findings may be, the traveling public need not be robbed of the pleasure of its radio if some sort of switch be devised that will prevent its operation while the car is in motion. This feature, alone, would answer all objections to date.

Beware the Big Ballyhoo

ANY business that intends to build and to maintain a reputation based upon dependability and established service must conduct itself with a certain display of dignity. It cannot afford, for any consideration, to approach vulgarity. A strong word, to be sure, and at a glance a superfluous warning; but vulgarity is the only word to characterize the effect of a certain type of big sales scheme that is being promoted and sold to the small retailer by many professional sales organizations.

Of course, timely sales and wise sales promotion are important vitalizing factors in any business, but there are ways and ways of doing things. Banner hung fronts and three-foot exclamation points attract the eye, *but they do not inspire confidence.*

The public hardly looks twice at the common spectacle of a store bristling with flashy signs shrieking hackneyed exaggerations. These things happen too often and mean too little; the indiscriminating sales promoter will sell his scheme to any and all.

Sales services have much to offer the retailer. They can relieve him of many of the details of a sales campaign—printing, painting, mailing, distribution, etc.—but most of them offer only the stalest of ideas. The ideas must be yours, in keeping with the spirit and reputation of your establishment. Cut out the circus lithographs and the quietly satisfied customer will be your best barker.

Only Radio Will Give the Farmer—

1. *A stock-ticker connection with his markets.*
2. *A leased wire service on weather facts.*
3. *An acquaintance with farm scientists and their findings.*
4. *A front row seat in the theatre of world events.*
5. *A participation in the daily life of the nation.*

Uncle Sam's Radio Service to Farmers

- 215 stations send daily weather forecasts.
- 112 stations maintain a market news service.
- 163 stations broadcast scientific farming information.
- 32 stations (NBC chain) conduct a "Farm and Home" hour.

Morse Salisbury, Chief of Radio Service, U. S. Department of Agriculture, says of the farmer, "No other class has so much to gain from the purchase of a set; no other class needs radio so."

on Husky Voiced TUBES

Who Says the Radio-Piano Question Is Out of Tune?

NOT long ago a book of etiquette astonished publishers by its popularity. The question, "Do you know how to behave?" struck home in human consciousness.

This desire for the social graces offers a true background for the sale of pianos. Parents who subscribe for French lessons, dancing instruction, horseback riding, and golf tuition for their children and buy the book-of-the-month regularly, will never balk at a piano. For a youngster or grown-up who can play a piano knows how to behave gloriously in social circles—in fact he is assured popularity and a halo of attention.

Radio is part of the musical diet, but it is not a competitor of the piano any more than porterhouse steak is a competitor of chocolate cake. In the absence of one, you might make a meal on the other. Both the radio and the piano have their place. One awakens human consciousness to the world of music. The other exhilarates with its possibilities for self expression. The future will see them traveling the business road together, in complete harmony.

Do We Have to Demonstrate?

TRY one in your home without cost or obligation." The old familiar song of the home demonstration chorus. Who doesn't know the tune? And it has always been the accepted fact that all radio dealers must join in. Who started it, no one knows. Just grew up like Topsy. But, recently there have been some discordant notes heard. Why, ask some thoughtful dealers, must we keep on with home demonstration idea which, because of unscrupulous customers, causes us all sorts of worry and eats into our profits? So, they say, we will stop giving home demonstrations except in justifiable circumstances. On page 18 of this issue is an article of how one dealer viewed this problem and what he did about it. Then, on page 45 you will find our own analysis of the cost of home demonstrations. The conclusion would seem to be present methods are due for revision. Certainly there is no need of being as free with sending sets out on a no charge basis as we are now. Perhaps you have already discontinued home demonstrations, or do you disagree with the proposition? Comments on this subject will be appreciated.

New Fields for Amplifiers

PRACTICALLY every town of any size is getting an airport for itself these days. America is gradually taking to the air. And for the radio dealer it presents another place to sell amplifiers and speakers. Many airports are at the present time equipped with an ampli-

fier system so that people out on the field may be called to the office or to the telephone. The sale of such an installation should mean a nice little profit to the dealer doing the job. No unusual amount of skill is required as most of the apparatus can be had ready to install. If there is an airport in or near your town, go out there today and see about installing a loudspeaker system. Even one sale is better than no sale at all.

Sturdy Tubes Required for Automobile Radio

NOT the least of the peculiar problems encountered in the development of automobile radio is that of sturdy tubes. A radio set installed in an automobile is certain to be subjected to greater mechanical strain than the usual home set, hence the tubes must be mechanically stronger. As a consequence, the heater type is being favored by the designers of automobile radio sets, and only the sturdiest types are being sought. Filament type tubes are unsuitable for automobile radio work, not only because of the danger of sagging and broken filaments, but because of their microphonic characteristics. The demands of automobile radio make for a robust race of radio tubes in the future, which will be a boon to the radio industry at large.

Sound Logic





New Products for

This editorial section is prepared purely as a news service, to keep readers of "Radio Retailing" informed of new products.



Model 72

Short Wave Receiver Using Pentode

THE new pentode tube is employed in the short-wave receiver of Norden-Hauck, Inc., Marine Bldg., Philadelphia, Pa. It is an a.c. model with six tubes: one pentode, two 227's, two 245's and one 280. The r.f. stage has a tuned input and uses the pentode.

Due to design of coils and shielded condensers, a wide wave length range is covered. The coils are wound on hard rubber forms to minimize losses in efficiency. The cabinet is aluminum, 9 in. high x 10 in. deep x 19 in. wide. It is available in natural color, satin finish, or in walnut finish.

A d.c. model may also be had with the same specifications except that only five tubes are used and of different types.—*Radio Retailing*, March, 1930.



The Woodstock

sliding doors. The dimensions are 43 in. by 25 in. by 16 in. This model retails at \$150.

The Woodstock, Model 31, is simple in design with a center panel of figured hard maple, framed at the top and sides with decorative carved panels. This model, 43 in. high, 25 in. wide and 16 in. deep, retails at \$140.

The Tremont, Model 21, is characteristic of early Colonial furniture. Because of its compact size, it is ideal for the small home or apartment. The front is of figured Oriental walnut. This cabinet is 36 in. high, 23½ in. wide and 12½ in. deep and retails at \$130.

All the above models operate on 60 or 25 cycle, a.c., but are also available for d.c. and battery operation.—*Radio Retailing*, March, 1930.

Kylelectron Models 71 and 72

NON-DIRECTIONAL reproduction is claimed for the new Models K-71 and K-72 of the Kylelectron radio made by the United Reproducers Corp., Springfield, Ohio. Both have, of course, the Kylelectron speaker which is found only on this company's receivers. Ten tubes are used including four 224's, one as a power detector and three in the r.f. stages, a 227 in the first a.f. stage, two 245's, a 280, one 201-A as a polarizing tube and one line ballast tube. A perfected phonograph pick-up made possible through the tapping of the audio channel at a new point, is included.

Model K-71 in an American walnut cabinet 42½ in. high and 29½ in. wide presents an open face grille backed by a dull bronze grille cloth. The intended retail price is \$149.50.

Model K-72 is similar in design and of the same height, but has full length doors of matched butt walnut designed after the early Colonial period. This model retails at \$169.50.—*Radio Retailing*, March, 1930.



Model 71

New Audions

AFTER considerable research and engineering development, the DeForest Radio Co., Passaic, N. J., has placed on the market two new and improved Audions. They are a 499 dry-cell tube and a 422-A dry-battery type of d.c. screen-grid tube.—*Radio Retailing*, March, 1930.



New Radio Receptor Products

THE new speaker just announced by the Radio Receptor Co., 106 Seventh Ave., New York City, has a frequency range of from 40-8000 cycles, with an effective frequency response of from 40-6000 cycles, it is claimed.

A power supply that eliminates the last battery necessary in talking motion picture theater sound installations is also announced. It supplies the necessary current to the exciter-lamp and the head-amplifier tubes, as well as the B-supply for the latter.

A precision electrical pick-up is now ready for the market. It employs a special pick-up head, mounted on an arm which rides on a ball-bearing swivel, and carries a sliding weight so as to adjust the stylus bearing pressure for best results.

Volume controls, in all ranges and sizes, designed for unusually strenuous duty over long periods, may now be had from this company.—*Radio Retailing*, March, 1930.

Filtervolt, Jr.

THE Insuline Corporation of America, 78 Cortland St., New York City, announces the development of an improved light duty noise eliminator for a.c. receivers, known as the "Filtervolt, Jr." It is particularly adapted for use in eliminating the more common disturbances from household appliances, the switching on and off of lights and the use of dial telephones. The intended retail price is \$3.—*Radio Retailing*, March, 1930.

Three Stewart-Warner Models

CABINETS of early English design are featured in the three new models just brought out by the Stewart-Warner Corporation, Diversey Parkway, Chicago, Ill., to complete its line of table and console receivers.



The Tremont

These models are equipped with the 8-tube screen grid set (three 224's, one 227's, two 245's and one 280), and electrodynamic speaker.



The Oxford

The Oxford - Hepplewhite, Model 41, is an adaptation of an original Hepplewhite design. Hand-matched Oriental walnut forms the front panel with decorative Australian lacewood overlays as the relief motif. It has

Portable Timing Device

THE portable radio timing device brought out by Timing Devices, Inc., Pure Oil Bldg., Chicago, Ill., can be placed on the top of any radio set, converting it into a coin-operated receiver. No special wiring is necessary; simply plug the radio cord into the timer and the timer cord into the wall socket. It is made to play five minutes for 5c., although it may be had with dime or quarter coin slots. As many as 20 nickels can be inserted at once.

The cabinet is walnut veneer and measures 14 in. high x 23 in. wide x 5 in. deep. The list price is \$80.—*Radio Retailing*, March, 1930.



Remote Control

NOW it is possible to turn the radio off right at the telephone when you answer, eliminating the inconvenience of hurrying to the set and then to the phone. The remote control manufactured by SCO Electrical Products, Inc., Jackson, Mich., attaches to the phone where the small "on and off" switch is located. The radio cable is plugged into the outlet on the control unit. The cable from the control is placed in the wall socket and the remote control switch bracket is snapped on the telephone standard. Twenty-five feet of small flat cord is furnished. Current is reduced only 10 volts through wire running between control switch and control unit. It will work with any set regardless of size, make or amount of current used, the maker says. The intended retail price, complete, is \$5.50.—*Radio Retailing*, March, 1930.

Dealers to SELL

All announcements appearing on these pages are published without advertising considerations of any kind whatsoever.



Model 110

Capehart "Amperions"

EIGHTEEN records is the record changing capacity of the new "Amperions," which have been added to the line of the Capehart Corp., Fort Wayne, Ind. They are available both in straight automatic phonograph models or in combination with a radio. These new models do not replace the Orchestropes.

From 10 to 18 records can be played, turned and changed with the Amperions. The device contains fewer parts than any other

particularly designed for use in auditoriums.

Model 110 is a commercial combination. Depositing of coin actuates playing mechanism for one phonograph record or five minutes of radio, both operating from the same coin box. Change-over is made by a switch.

Model 100 is a commercial model phonograph with illuminated top compartment with glass door.—*Radio Retailing*, March, 1930.



Model 120

Fada Model 40

AN a.c. screen grid console with dynamic speaker, new automatic station finder and indicator, and special tone character adjustment control has just been announced by F. A. D. Andrea, Inc., Long Island City, N. Y.

A radically new and improved impedance coupled circuit design with three screen grid tubes is used. In addition there are two 227's, two 245's and a 280. An overall static shield to improve selectivity in local broadcasting shock areas; a jack for phonograph connection and a power line drainage condenser to suppress power line disturbances are standard equipment. The new automatic station finder and



Model 100

of equal capacity, according to Capehart, and there are only two places to oil and only two adjustments are possible. The radio-phono combinations incorporate a screen grid receiver. Practically all of the commercial models may be had with or without coin equipment and with a choice of amplifier capacity to take care of any required number of auxiliary speakers.

Model 140 is suitable for the home and comes in combination with a screen grid set at the top concealed by sliding doors. The record magazine is accessible at all times.

Model 130 is a club model of walnut construction. A light in the chassis compartment turns on automatically when the doors open.

Model 120 is a club model radio-phono combination both parts of which are designed for remote control and, with exception of tuning, the instrument can be controlled from any point provided with proper wiring.

Model 150 is a commercial model with coin equipment of the push slide type. It is par-



indicator lights up when the set is properly tuned to any station previously logged.

The cabinet is a walnut high-boy of Gothic design about 48 in. high x 26 in. wide x 17 in. deep. The doors are of the French type with wrought brass pulls and panels of reverse diamond matched figured walnut, decorated with maple burl overlays. The intended retail price is \$260.—*Radio Retailing*, March, 1930.



Wall-Type Speaker

A WALL-TYPE reproducer designed for installation in hotels, schools and other places where reception is distributed from a centralized point is now ready according to announcement from the Best Mfg. Co., 1200 Grove Street, Irvington, N. J. It is known as the flush wall-type speaker and is sold complete, ready for use, finished to harmonize with any interior. It is 10½ in. square by 3 in. deep, and has a cone type speaker.—*Radio Retailing*, March, 1930.



A-Eliminator

THE "King Cole" adapter made by the Anylite Electric Co., 1418 Wall St., Ft. Wayne, Ind., is used to eliminate the use of the A-battery where 32-volt farm lighting current is available. One end is screwed into the light socket and the other end connected to the receiver, thus delivering 6-volt current to the set and doing away with the A-battery. Special units for 110-volt d.c. are available. The intended retail price is \$2.

A speaker of the long air-column type for farm lighting sets is also available. It retails at \$12.50.—*Radio Retailing*, March, 1930.

Victory Speakers

EMBODYING several new principles in the building of sound reproducers for theater and public address systems, Victory Speakers, Inc., 7131 E. 14th St., Oakland, Calif., is placing on the market two electrodynamic reproducers, the Victory Giant, Model 80, and a smaller model, No. 70. The large size has a 16-in. cone and the smaller one a 12-in. cone, inside measurements.

The Victory Giant will handle the output of any amplifier without distortion, rattling, or blasting, the maker says.

Model 70 differs from the Victory Giant only in that it will not handle as much power as the larger model, and the cone has a little steeper pitch, mak-

ing it more directional in the handling of sound waves. This model is designed to be used singly in long narrow theaters, or as a double installation where there are high balconies.

Among the new principles is the concentration of the field energy and an intensification of the magnetic flux at four points on the top plate with a more powerful drive to the movable coil; breaking up an otherwise undesirable eddy current set up around the pole pieces.—*Radio Retailing*, March, 1930.

Portable Electric Phonograph

TO meet the demand for a portable and handy form of electric phonograph, the Stevens Manufacturing Corporation, Newark, N. J., has announced a new model in an imitation leather case with carrying handle and snap catches. The case contains a Stevens-Sibley electric motor, an accurately balanced die-cast turntable, and a precision electric pick-up with volume control. Any standard type of electric pick-up can be supplied. The turntable motor may be operated on d.c. supplied by self-contained dry cells, or on the usual 110-volt a.c. supply by means of a step-down transformer and rectifier included with the motor.—*Radio Retailing*, March, 1930.

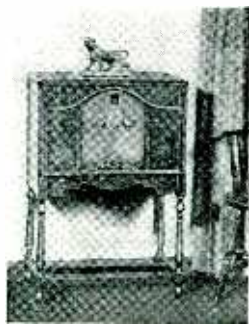


Electrad-Loftin-White Amplifier Kit

THE Electrad, Loftin-White Amplifier, offered by Electrad, Inc., 173 Varick St., New York City, designated as the A-245, contains all parts except tubes, including a drilled metal chassis, self-contained a.c. power supply, special resistances and all accessories.

It utilizes one 224, one 245 and one 280 type tube. This amplifier gives an unusual amount of undistorted volume and purity of tone, owing to its complete freedom from audible frequency discrimination, the manufacturer claims.

It is designed primarily for use as a phonograph amplifier, but with the addition of a conventional coupling device it can be connected to various radio tuners. A.c. hum is neutralized by the adjustment of a potentiometer. The list price is \$35, less tubes.—*Radio Retailing*, March, 1930.



Gulbransen 9950

AN ATTRACTIVE lowboy cabinet, only 36½ in. high, has been brought out by the Gulbransen Co., 3232 W. Chicago Ave., Chicago, Ill. The set is a 9-tube, screen-grid receiver with double volume control. The intended retail price is \$99.50.—*Radio Retailing*, March, 1930.

Electric Airpainting Unit

A USEFUL and practical electric portable airpainting unit for the radio dealer to use in touching up merchandise that has been marred or in refinishing repossessed sets may be obtained from the Paasche Airbrush Co., 1909 Diversey Parkway, Chicago, Ill.

Model F518-½ hp. has an a.c. single phase, 110-volt, 1½x1½ air compressor; water and oil separator with gauge; and pop-off valve. It is mounted on a metal base in one unit with 15 ft. cord and attachment plug. The intended retail price, complete, ready for use, is \$58.35.—*Radio Retailing*, March, 1930.

Radio Clarifier

TO eliminate radio interference caused by the spark used on electrically ignited oil burners and other electrical devices, the Automatic Oil Heat Company, 92 E. Fourth Street, St. Paul, Minn., has placed on the market the "Simplex" radio clarifier. The intended retail price is \$5.—*Radio Retailing*, March, 1930.



Lightning Arrester

ALL the requirements laid down by the National Electrical Code and by the Fire Underwriters rules have been complied with in its lightning arrester, says Bud, Inc., 2744 Cedar Ave., Cleveland, Ohio. The intended retail price is \$1.—*Radio Retailing*, March, 1930.

"Stiktape" Aerial

AN AERIAL which can be hidden from view, known as the "Stiktape" aerial, may be obtained from the Sampson Industries, Inc., 9 Rutger St., St. Louis, Mo. It is made of a new non-corrosive alloy, coated on the back with adhesive rubber which will stick to wood, glass, painted surfaces, etc. and comes in a roll.—*Radio Retailing*, March, 1930.

Trimm Speaker

A SPEAKER with a number of uses has been developed by the Trimm Radio Mfg. Co., 847 W. Harrison St., Chicago, Ill. It is compact yet sturdy and sensitive. There are three integral parts: the front casting of aluminum, the containing box of steel, and the chassis for housing the operating unit.

This speaker can be used for automobile radios, the metal containing box lending itself to assembly on the frame or behind the dash board; for hotel and apartment installations, and, if desired, the box can be furnished first and installed in the wall as the building is put up and the speaker parts shipped later. It is known as model P5 38.—*Radio Retailing*, March, 1930.



Transmitting Condensers

MICALEX insulation is used as standard equipment with the type TMU 5,000-volt and 7,500-volt transmitting condensers which the National Co. Inc., Malden, Mass., now carry. They are designed to meet the demand for moderate priced stock condensers for higher power work than covered by National's standard DXT type, and yet smaller and less expensive than its Navy type. They range in price from \$40 to \$47.50.—*Radio Retailing*, March, 1930.

Rectifier Type Meters

THE introduction of rectifier type meters is announced by Ferranti, Inc., 30 W. 42nd St., New York City, for alternating current measurements having an accuracy of 1 per cent at all frequencies between 20 and 6,000 cycles.

There are two types, one having a resistance of 667 ohms per volt drawing 1.5 ma. at full scale deflection, and the other having a resistance of 133 ohms per volt drawing 7.5 ma. at full scale deflection.

These new meters consist of a standard low current d.c. movement operated by a rectifier of the copper oxide type. The available ranges are 750 microamperes to 50 milliamperes and 1 volt to 400 volts.—*Radio Retailing*, March, 1930.

Shielded Condenser

THE United Scientific Laboratories, 113 4th Ave., New York City, have announced a new shielded condenser designated as type S.G.

Its completely shielded stators with section shields protruding beyond the grid ends of the stators eliminate changes of coupling, it is said. All metal parts are heavily cadmium plated to prevent tarnish and corrosion. Additional rigidity is given to the entire assembly owing to the heavy drawn dust-proof cover which completely covers the unit.—*Radio Retailing*, March, 1930.



Jefferson Tube Checker

A NEW and simplified tube checker for a.c. tubes has just been perfected by the Jefferson Electric Company, 1500 S. Laffin St., Chicago, Ill.

With this tester it is possible to know if the plate and grid are shorted, the plate is open, and the filament is open or shorted. It has six sockets, one each for the 226, 227, 224, 247, 171A and 280 type tubes; a millimeter; a push button; and the connection for testing screen-grid tubes. The net price to the dealer is \$13.50.—*Radio Retailing*, March, 1930.

New Design Van Horne Tubes

A NEW tube design, which is known as the "Ring Type" construction, has been developed by the Van Horne Tube Co., Franklin, Ohio, in the form of a gold plated ring between the top of the base and the glass tube. This metal functions as a heat radiator, tending to keep the temperature, and consequently the electrical characteristics of the tube, at a more uniform value. Aside from these technical features, the use of the ring makes for a better appearing tube.—*Radio Retailing*, March, 1930.



Samson "Qualpensator"

TO VARY tone quality in the radio set, phonograph, power amplifier, pick-up or talking motion picture equipment, the Samson Electric Co., Canton, Mass., is making its "Qualpensator." By simply turning a switch and adjusting the knob, the desired tone can be obtained. There are three knobs labeled low, middle and high for pitch and two larger knobs labeled compensation and volume. The intended retail price is \$25.—*Radio Retailing*, March, 1930.

Remote Control Speaker

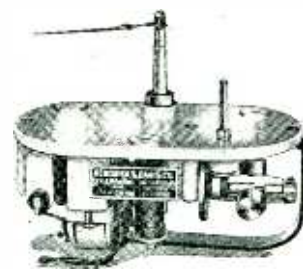
A MPLION Corporation of America, 133 W. 21st St., New York City, has a radio speaker equipped with remote control for a.c. sets, so that the speaker may be located in any room in the house. The set may be turned "on" or "off" and the volume varied, either from the speaker, or at the receiver.

This useful accessory consists

of an Amplion speaker, similar to the "Royal" but having two extra small knobs on the front. At the rear of the speaker, there are five colored binding posts. The rest of the remote control equipment consists of a small mahogany-finished box, 4 in. x 5 in. x 2½ in. high. This has two knobs on top, identical with those on the front of the speaker. A speaker cord issues from another side of the box, which also contains a standard outlet receptacle and two phone tip jacks. On an adjacent side are mounted five binding posts, colored to correspond with the posts on the rear of the speaker. A five wire connecting cable is available for making the connections between the posts on the speaker and those on the control box. List price \$30.—*Radio Retailing*, March, 1930.

Arcturus D.C. Tubes

A LINE of battery type tubes is now being made by the Arcturus Radio Tube Co., Newark, N. J. These tubes will be designated as follows: 012A, 101A, 099, 122 and 071A.—*Radio Retailing*, March, 1930.



Electric Phonograph Drive

"PHONODRIVE," an electric phonograph drive made by the Kendrick & Davis Co., Lebanon, N. H., is strong and rigid and there are but two revolving shafts in the drive. The armature shaft is of ¼ in. tool steel and revolves in self-aligning, bronze bearings. This shaft through its brass worm transmits the power to a bakelite worm gear, housed in a fool-proof stripping device, which makes stripping of a gear impossible, it is said. The list price, including automatic stop, cord and plug, but without turntable, is \$25.—*Radio Retailing*, March, 1930.

"Phantom" Aerial

AN INSIDE aerial contained in a novelty skull case with movable jaws is being marketed by the Phantom Aerial Co., 1722 Pallister, Detroit, Mich. It is 4 in. by 4 in. by 2½ in. and retails at \$3.95. In a plain Bakelite finish case, the price is \$2.75.—*Radio Retailing*, March, 1930.



Radio Retailing, March, 1930



Screen-Grid Battery Set and A Speaker

FOUR 222 tubes, one 240 and one 171-A tube are used in the battery operated, screen grid receiver being made by the Atchison Radio Mfg. Co., Atchison, Kan. The one-piece aluminum casting which combines the chassis, variable condenser frame, shielding and table model cabinet in one compact unit, contains 12 cells, each forming a compartment for a coil, tube, or condenser. The battery switch and volume control are combined into one unit. The filament current is 1.2 amps and the B-battery draws 23 to 28 mills.

The illustrated table model lists at \$60, without accessories. In a console with magnetic cone the price is \$110; with dynamic speaker, \$122.50.

A speaker made especially to operate with this set may be had at \$22.50.—*Radio Retailing*, March, 1930.



Resistors and Volume Controls

POLYMET Manufacturing Corporation, 829 E. 134th St., New York City, announces an entirely new line of carbon and wire-wound volume controls, including certain dual volume controls for set manufacturers.

Wire-wound tubular resistors which are treated with a heavy coating of bakelite compound to stand very high temperatures and offering excellent mechanical protection, are also ready. New resistors of various types, and improved tapped voltage dividers round out this new line.—*Radio Retailing*, March, 1930.

Rectifiers

"REPLENO" rectifiers, made by the E. E. Jacobs Manufacturing Company, 2802 N. Kedzie Avenue, Chicago, Ill., are designed for electrolytic B-power units. The solutions may be renewed at any time, as can be the aluminum electrode, which is held in the Bakelite cap by means of nuts. This construction permits of connections by wire between the cells. Chemically pure aluminum is used for the positive electrode, while a chromium alloy serves as negative post. Price per cell, complete, \$1.—*Radio Retailing*, March, 1930.

Radio Retailing, March 1930

New Supreme Instruments

THE Supreme Instruments Corp., Greenwood, Miss., announces as a part of its line of testing equipment, a new tube checker, known as Model 17. This instrument is equipped with a two scale Weston milliammeter. It operates on the 110 volt, 60 cycle line.

The outstanding features of the instrument are its simplicity and speed in operation. A separate socket plainly marked is provided for each a.c. or d.c. filament reading of all tubes in general use. A special socket is provided for testing a.c. screen-grid tubes. This arrangement



eliminates the necessity of all switches. The net price is \$19.50.

The new Model 50 tube tester is self-contained and drains its supply from the 60 cycle, 110 volt a.c. line. A unique feature is the constant voltage transformer, an entirely new development which maintains a constant output irrespective of load within the limits of the transformer. The usual testing apparatus is included, of course. The size is 7 1/8 in. x 10 1/2 in. x 5 1/2 in. and it weighs approximately 14 pounds. The unit sells at \$98.50, net.

An ohmmeter, known as Model 10, is also available. It is small in size and light in weight and can be easily carried in the pocket. Net price, \$17.50.—*Radio Retailing*, March, 1930.

Gang Condenser

A NEW type of gang condenser is being made by the Rochester Tool & Gauge Corp., 45 Halstead St., Rochester, N. Y. It is made in two capacities, (.0005 and .00035 mfd.) and ranges from the single condenser to a six-gang in both capacities.

Technical information on this product is as follows: The compensator gives a variation of approximately 40 mmf. Minimum capacity of the .0005 mfd. is 30 mmf. and of the .00035 mfd., 24 mmf. The contour of the rotor is such that forty per cent gives a kilocycle separation, the other sixty per cent a two meter separation. The condenser will be furnished clockwise or counterclockwise. The rotor and stator blades are made of a special hard sheet aluminum and are .032 in. thick. Prices on request.—*Radio Retailing*, March, 1930.

Ammeters

ROLLER-SMITH Company, 2233 Broadway, New York City, announces three types of thermocouple ammeters, and milliammeters for d.c. and a.c. of all frequencies, including radio frequencies.

Types TW (3 1/2 in.) and FW (4 in.) cover a range of 100 M.A. to 20 amperes; and type STW (7 1/2 in.) from 10 to 100 amperes.

These instruments incorporate a new and improved form of thermo-couple, which is distinguished by very high overload capacity and sustained accuracy over a wide range of temperature.—*Radio Retailing*, March, 1930.



Coin-Operated Set

AN automatic a.c. radio receiver called the "Melodie" is being made by the American Radio Laboratories, 4250 W. Chicago Ave., Chicago, Ill. The motor driven timer can be adjusted at the factory to run either 5 or 10 minutes and to work with a nickel, dime or quarter. From 1 to 20 coins can be deposited at one time. The matched dynamic speaker is of special design. The cabinet is constructed of walnut veneer, substantially built. Intended retail price, \$295.—*Radio Retailing*, March, 1930.

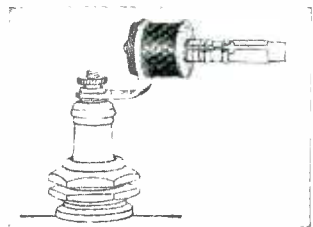
Aerial Eliminator

AN aerial eliminator employing a new "pick-up" principle is being manufactured by the Burgold Corporation, La-Grange, Ill. It is entirely self-contained and can be placed in the radio cabinet or behind it. The "Attractor," as it is called, makes use of a special tube. This tube is not connected to the light socket or battery, however, and will not deteriorate. Its action is both amplifying and filtering. The intended retail price complete with tube, 15 feet of shielded ground wire and connecting clip, is \$7.50.—*Radio Retailing*, March, 1930.

Automobile Resistors

ALLEN-BRADLEY CO., 286 A Greenfield Ave., Milwaukee, Wis., is producing automobile resistors for the suppression of interference from ignition systems in radio-equipped cars. These resistors, which are being used by several leading car manufacturers, are furnished to provide individual resistors for each spark plug and for the common cable to the distributor. They increase the resistance of the high tension ignition system and minimize the disturbing oscillations in the ignition circuit which interfere with the operation of a radio receiver in the car. When used with suitable by-pass condensers in other parts of the ignition circuit, the use of shielded ignition cables is avoided.

Tests indicate that the power output of engines is unaffected by the use of these resistors, that they introduce no difficulty in the starting of motors in cold weather. Their resistance values are approximately 25,000 ohms.—*Radio Retailing*, March, 1930.



Vibration Absorbers For Radio Sets

MADE of a spongy substance and supplied in cuplike form to fit under the legs of the radio set, the "No-Vibe" shock and vibration absorbers put out by the Dalitz Mfg. Co., Cleveland, Ohio, eliminate the jar from passing street cars, trucks, etc., prolonging the life of the tubes. They may also be used with phonographs, refrigerators, etc., and are unobtrusive in appearance. The retail price is \$1 per set of four.—*Radio Retailing*, March, 1930.

Resistors

A NEW type of Durham metalized resistor, MF-43, is announced by the International Resistance Company, 2006 Chestnut St., Philadelphia, Pa. The over-all length is 1/2 in. and the diameter is 3/8 in. It may be used in connection with "faders" or where a number of resistors are required for controlling the volume output of amplifiers in theatre installations, radio sets, heavy duty amplifiers, etc. It is made in all ranges from 100 ohms to 3 megohms with 2 in. wire leads. The normal rating is 1/2 of a watt.

Something new by way of wire-wound, non-inductive resistors with resistance values as close as 1/2 to 1/2 of 1 per cent, is also announced.

The Durham wire-wound unit consists of an isolantite tubing with prominent flus to form a series of miniature bobbins which hold the wire winding. The winding is arranged in opposite directions in adjacent bobbins for the non-inductive effect. Resistance values from 500 ohms to several megohms are available.—*Radio Retailing*, March, 1930.

Westinghouse Battery Charger

A NEW "Rectox" rectifier employing the copper oxide principle is announced by the Westinghouse Electric and Manufacturing Co., East Pittsburgh, Pa. It is plugged into the lamp socket and the d.c. leads are attached to the battery terminals.

Being light in weight, the Rectox can be moved to the battery. There are no parts to wear out or replace, with the exception of the fuses, and no chemicals or acids are used.

The rectifying unit consists of a dry-type rectifier, made from copper. The copper oxide principle of rectification takes advantage of the electrical properties of copper, coated with a layer of copper oxide, permitting electric current to pass in one direction only.—*Radio Retailing*, March, 1930.

Forward Together

Significant Events of

MARCH, 1930

Remarkable Rallying of Purposeful Radio Men at Fourth Annual NFRA Conclave, Cleveland—Measures Taken to Correct Past Mistakes—Other Observations



By Detector

PAPER and ink are not the mediums adequately to present the fighting spirit of the Cleveland Convention. Here, in all truth, was assembled a real "brass tacks" gathering of serious-minded leaders from all branches of this industry of ours.

The Fourth Annual Convention of the National Federation of Radio Associations, with which is affiliated the Radio Wholesalers Association, was supplemented by the presence of many well-known

set and tube manufacturers. The personal interest and co-operation of these executives was one of the many encouraging features of the Hotel Statler meetings. Dealers, jobbers, manufacturers, all took off their coats and went to work.

Present obstacles in the path of the ethical dealer's way to profitable selling—both of his own and of other's making—were handled without gloves. A spade was called a spade—and a knave, a knave.

Faith in Future Crystallizes

And out of this frankness, in time of storm, grew, as the hours passed, a strong feeling of faith in the future. This confidence was based on these facts:

a. Causes have been nailed to the mast. From now on the way of the transgressor will not be condoned.

b. For the first time all branches of the industry are working together, in entire accord, and with a clearer understanding of the job at hand.

c. The fittest surely will survive, and this very process of elimination will spell stabilization.

d. There exists today a tremendous unsatisfied market for radio products.

What, then, was done at Cleveland to clarify the radio situation?

Three dealer meetings were held. Under the able guidance of Henry M. Steussy, Milwaukee, the clarification of fixed policies and their enforcement by local associations were discussed. The subjects covered were: trade-ins, demonstrations, financing, time-payment sales, accounting,

retail insurance, service and distress merchandise.

It was agreed that the privilege of a home demonstration should be charged for—a \$3 to \$5 deposit being demanded in advance, to apply on the purchase price.

The successful operation of this plan in Duluth, Minn., (to be reported in *Radio Retailing*) received much favorable comment. Local associations, it was stated, can and should institute and enforce definite rules governing trade-in allowances, demonstration fees and interchange of information on chronic "joy riders" and dead beats.

David M. Trilling, Philadelphia, supplemented by Mr. Steussy in his opening address, recommended a series of constructive measures to alleviate the present attitude of the financing houses, substantially the same as those listed on page 23 of the February issue of this magazine. Detector suggests that you stop right here, get your February copy of *Radio Retailing*, and again review these pertinent items.

A training course and system of grading, paying and identifying service men, was advanced by Allen C. Forbes, Chicago, and Willis K. Wing, New York City. (See page 32, Dec. issue *Radio Retailing* for detailed account of this most successful idea.)

"Distress Merchandise"

Perhaps the subject which caused the most discussion was that of "distress" merchandise. This important factor in our business health, and its twin brother, "dumping," came in for caustic criticism, not only by the dealers, but by the very substantial number of jobbers present at the Statler. Out of these agitations will come, it is hoped, a plan for the erection of a special inter-industry organization or

machine which will function next winter in the capacity of a controlled clearing house for surplus stock. In other words, for the purpose of seeing that attractive "buys" reach ethical dealers and are so distributed as to cause a minimum upsetting of the market and of the public standard of radio values.

Prominent Personalities



HARRY ALTER,
RWA new president.

PETER SAMPSON,
retiring president of RWA



HENRY STEUSSY,
heads retailer group.

MICHAEL ERT,
docs yeoman service for Federated.



JULIAN SAMPSON,
active in NFRA affairs

Convention Keynote

the Month, Personalized

NEW YORK, N. Y.

With or Without Tubes?

Shall set manufacturers ship the initial equipment of tubes with their receivers? Shall the wholesaler include a "kit" of recommended tubes with each shipment to the dealer, or shall the retailer be free to exercise his own judgment in this matter?

Shall we advertise sets complete, or "less tubes"?

These vital policies occupied much of the time of the wholesalers, and also were discussed at length by the tube and set manufacturers, who met concurrently at the Hotel Cleveland.

As a result of these discussions a special joint meeting of the set and tube committee of the Radio Manufacturers Association will be held in New York, March 7, for the purpose of formulating a definite policy covering this situation.

The proper introduction—or squelching for the time being—of the pentode tube also, it is understood, will come in for attention.

This meeting marks the first attempt of the set and tube interests to discuss together their common problems.

ality made warm friends for him in the radio industry from coast to coast, and Detector but expresses the sentiments of all who knew "Happy Jack" in saying that his memory will linger long and be an inspiration to all of us

Indianapolis Next Year

At the close of Tuesday's general session it was announced that Indianapolis, Ind., had been chosen for the scene of the 1931 conclave. St. Louis and Rochester were close contenders.

Read These Resolutions

The following resolutions, unanimously approved by the entire assemblage, reflect clearly the thinking of the Cleveland Convention.

That the Zone System Be Abolished

WHEREAS: President Hoover in his last message to Congress urged that the zone system of allocating wave lengths be abolished entirely in all its phases, and

WHEREAS—it was agreed by broadcasters, the trade and listeners alike that the system is unsatisfactory and impractical.

BE IT THEREFORE RESOLVED, By the National Federation of Radio Associations, that the Federal Radio Commission should be given full power and authority to assign wave channels and power according to public interest, convenience, and necessity, without respect to any zone arrangement, and that the zone system be abolished, and

FURTHERMORE—it is recommended that each individual radio dealer, jobber, manufacturer and association write personally to his Congressman, and to all Senators and Representatives from his state urging the abolishment of this cumbersome system, in view of the fact that this question is likely to be brought up in Congress in the near future.

N.A.B. Saved Baseball Broadcasting

WHEREAS—The National Association of Broadcasters has co-operated splendidly with this Association the past year.

BE IT THEREFORE RESOLVED, By the National Federation of Radio Associations, in annual convention assembled at Cleveland, Feb. 11, 1930, that this association be extended a vote of thanks and complimented on the good works of their respective committees, and especially the work of their president, William S. Hedges, in securing the continuation of baseball broadcasting.

Overproduction

WHEREAS—There was an acknowledged overproduction of radio sets in 1929, which damaged the market and brought about unsatisfactory conditions in the grade.

BE IT THEREFORE RESOLVED, by the National Federation of Radio Associations, that we pledge our support to a system of gathering and distributing statistics on production and sales by the RMA, and

FURTHERMORE, that the statistics and information being gathered by our association be offered them for incorporation in their reports, and

FURTHERMORE, that all our own members urge their respective manufacturers to supply the statistics sought by the various RMA committees requesting information in

from Our Family Album



VERNON COLLAMORE, leaves A-K for RCA-Victor.



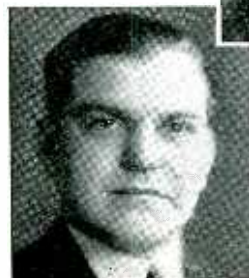
"EDDIE" RIEDEL, now with Majestic.



G. A. YANOCHOWSKI, Kellogg's president.



O. P. SMITH, gen. sales mgr. for the Webster Co.



OSCAR GETZ, retains his optimism.

Blackman, Alter, Steussy Honored

The East received the honor of furnishing Federated's next president. By unanimous directorial choice, J. Newcomb Blackman, of New York, was elected to head the National Federation of Radio Associations for the ensuing year. This move is indicative of the growth of this dealer-jobber branch of the great triumvirate of radio industry associations. Forty-five cities are now supporting this national movement.

Detector feels that this choice is an exceedingly happy one. Mr. Blackman, who speaks to the readers of *Radio Retailing* elsewhere in this issue, is exceptionally well qualified to cope with the pressing problems ahead of us.

Harry Alter, Chicago, replaces Peter Sampson, as president of the Radio Wholesalers Association, and Henry Steussy, Milwaukee, was elected president of the Dealers Association.

It was voted also to create an advisory board to be composed of the past-presidents of each affiliated body. This board, therefore, is represented now by the following experienced leaders of constructive action in industry affairs: Harold Wrape, St. Louis; Michael Ert, Milwaukee; Peter Sampson, Chicago, and Julian Sampson, St. Louis.

John Redell Passes

One familiar face was missing at Federated's fourth annual convention. John M. Redell, "Jack" to his host of friends, passed to his reward the latter part of January. No member of this association was a harder worker than vice-president Redell. His advice and suggestions were always valued, and he was never too busy to attend a meeting or work on a committee. His fine character and charming person-

order to avoid an overproduction in the coming year.

Premature Publicity

WHEREAS—The radio market is always sensitive to any new developments,

BE IT THEREFORE RESOLVED, by the NFRA, that premature publicity on new developments should not be released until the merchandise is ready for sale to the public.

Broadcasting Co-operation

WHEREAS—Good broadcasting is the foundation of the radio industry and should have our support on all situations arising that affect it.

BE IT THEREFORE RESOLVED, that a standing committee be appointed by the president of this association for the purpose of contacting and co-operating with the National Association of Broadcasters, and to be ready to make recommendations on broadcasting matters to this association at any time.

Radio Week

WHEREAS—National Radio Week, Sept. 23 to 29, 1929, sponsored by the National Federation of Radio Associations, was so highly successful and was capitalized on by so many radio trade associations,

BE IT THEREFORE RESOLVED, by the National Federation of Radio Associations, that the same thing be done this year, and that the week of Sept. 8 be designated as National Radio Week, and

FURTHERMORE, that the National Association of Broadcasters, the Radio Manufacturers Association, and the various state and territorial radio trade associations be invited to co-operate and make the greatest demonstration possible, and,

FURTHERMORE, that a committee be appointed to direct the work, lay out the plans and secure the co-operation of every possible medium and agency in calling this week to the attention of the nation.

Colonial Radio and Valley Appliances Combine

A significant item of the day comes in the form of an official statement from Dr. Fulton Cutting, chairman of the board of the Colonial Radio Corporation of Long Island City, N. Y., that the interests of his corporation and Valley Appliances, Inc., of Rochester, N. Y., will be as one. The latter concern, headed by W. S. Symington, is engaged in the manufacture of speakers and other products. This will be a closed corporation.

The officers and directors of the new Colonial Radio Corporation are as follows: president, W. S. Symington; vice-president



Why Lou Welling Is Smiling

NEWS RELEASE—At a meeting between the Grigsby-Grunow Company and the K. W. Radio Co., Inc., a settlement was reached whereby the recent controversy was amicably arranged to the entire satisfaction of both parties.

THREE MONTHS LATER—Welling interests buy up Temple. No wonder Mr. Welling (please excuse the caricature, Lou) is happy.

in charge of sales, Fred G. Carson; treasurer, E. J. Millin. The board of directors, of which Fulton Cutting is the chairman, includes Donald Symington, who is also president of the Baltimore Trust Company. C. J. Symington, William C. Schmidt, W. S. Symington and Fred G. Carson.

This move combines the engineering, production and financial resources of two strong corporations and makes possible still greater service for all concerned. Each division of the new corporation will continue to be operated as an independent unit, but the facilities of both will be greatly augmented. W. S. Symington will direct the manufacture and distribution of Symington products. I. G. Maloff, who designed the Peerless and Symington dynamic speakers, will be chief engineer of the combined corporations. The general sales office of the Colonial Radio Corporation will be run under the direction of Fred G.

Carson with Joseph Gerl as general sales manager in Long Island City, while the sales offices of Valley Appliances, Inc., will be located in Rochester.

Leonard Welling Buys Temple Assets

Leonard C. Welling, president of the K. W. Radio Company, Inc., New York, representing a syndicate of business men, has purchased the entire assets of the Temple Corporation, Chicago. The syndicate will continue operations in the Temple plant immediately and the trade name "Temple" will be continued. The purchase includes all patents, good will, trade name, machinery, equipment and merchandise inventory well above \$1,000,000.

The association of several experienced engineers and sales executives has already taken place and within a few days the plant will be in full operation. Detector is informed.

There will be several new merchandising innovations inaugurated which will assure the factories of continued operation during the off season.

Welling is now making headquarters at the Chicago plant where he will personally supervise all activities.

Erla and DeForest Receiverships Not Allowed

Detector is glad to report that the plans of a new and particularly vicious type of "racketeering" are not meeting with 100 per cent success in the radio industry. In at least two recent instances self-seekers who would throw going concerns into bankruptcy have been thwarted.

The petition recently filed to place Erla in the hands of a receiver has not been allowed, as the company showed assets many times greater than its liabilities.

At a recent meeting the creditors of the Electrical Research Laboratories approved a composition settlement calling for payment of indebtedness over an extended period of time.

Erla will continue regular production on its three models. There have not been, nor will there be, any reductions in price.

Vice-Chancellor Vivian M. Lewis, in

The Delegates Gather About the NFRA Festive Board



Indicative of the interest taken in the Cleveland Convention is the character of this luncheon assemblage. The boys were given the Mayor's private telephone number, an' everything.

Were *your* interests represented at this national rally? You would have felt like giving three rousing cheers for Cleveland when it all ended.

Chancery Court at Paterson, N. J., Feb. 5, dismissed an order to show cause why a receiver should not be appointed, obtained by a minority stockholder against the DeForest Radio Corporation. Counsel for the defense argued that the plaintiff was not a stockholder of record and that furthermore the DeForest Company did not owe a dollar. Vice Chancellor Lewis declared he was satisfied by the showing of the defense.

Attorneys for the DeForest Company brought out that the company's business in January increased 24 per cent over the preceding month and that during the eighteen months ended Dec. 31, 1929, had earned a total of \$626,425 despite the decrease in sales of radio tubes immediately after the collapse of the stock market in November.

O. P. Smith Joins Webster

The Webster Company, Chicago, manufacturer of power amplifiers and electric pickups, is strengthening its organization by the appointment of O. P. Smith as general sales manager. Mr. Smith has been identified with the radio and electrical industries for many years. He is well known in "Chicagoland" as a very successful manufacturers' representative.

Headphones for Headhunters



This is an example of the way Lyric Radio is preparing against the inevitable day when the radio market of the country will consist entirely of replacements. In the struggle to develop virgin fields, Lyric salesmen have been sent to Zanzibar, Keokuk, Staten Island and Patagonia.

The camera snapped the dealer for Dutch Borneo selling a screen grid outfit in exchange for a crystal set and a handful of diamonds.

Radio Board Reappointed

On February 20 President Hoover reappointed the present five members of the Federal Radio Commission for terms ranging from two to six years. This action was taken after a conference with Judge Ira E. Robinson, chairman of the Board, and a discussion with Senator James Couzens.

Those commissioners whose names were sent to the Senate for confirmation were: Judge Robinson, two years; Judge Eugene O. Sykes, three years; W. D. L. Starbuck, four years; Harold A. Lafount, five years, and Major General Charles McK. Saltzman, six years.

Recent RCA Licensees

The following companies have been granted a tuned radio frequency license and an electric phonograph license from the Radio Corporation of America: Story & Clark Radio Corporation, Chicago, and the Transformer Corporation of America, Chicago.

The Perryman Electric Co. Inc., North Bergen, N. J., has been granted a vacuum tube license under the RCA patents.

Radio Retailing, March, 1930

National Union Not a Subsidiary of RCA

Following the publication, in the February issue of *Radio Retailing*, of a chart showing the direct and allied corporation interests of the Radio Corporation of America, steps were taken by the preceding company, by the National Union Radio Corporation and by certain tube licensees, to correct any impression which this diagram unintentionally may have given relative to the relationship existing between the National Union Radio Corporation and the Radio Corporation of America.

The facts are that *no operating or special privilege relationship, other than that enjoyed by each and every other tube licensee, exists in this particular instance.* The only connection between these two concerns, it was stated, is the two million dollar loan and an option held by RCA, as yet unexercised, to purchase a *minority* block of NURC stock.

The chart which we published on page 25 of our last issue, and as these stated, was not intended to indicate lines of direct control. . . .

This chart was compiled from authentic information which has been released from time to time to the industry.

General Motors Controls 51 Per Cent of G.M.R.C.

As announced in the October, 1929, issue of *Radio Retailing*, the new General Motors Radio Corporation is controlled 51 per cent by the General Motors Corporation, while the Radio Corporation group holds 49 per cent of the stock. In the diagram appearing in February *Radio Retailing*, through an error, these two figures were reversed. This error is regretted. The diagram should have shown 51 per cent control in the hands of General Motors.

It also should be noted that the name Radio-Victor Company, on this same chart, now has been changed to the RCA Victor Company, Inc.

United Motors to Service Delco Auto-Radios

The entire sales and service of the new Delco automotive radio equipment, manufactured by General Motors, is to be handled by the national organization of United Motors Service, according to a statement by Ralph S. Lane, Detroit, president and general manager of United Motors. This is the first authentic information regarding the marketing plans for this new product.

United Motors controls branches in 27 cities of the United States and Canada, and has approximately 3,000 authorized automotive service stations. It feels that it is equipped, therefore, to meet all service and sales demands throughout the United States, particularly because of its experience in the automotive equipment field.

"The radio receiving set, as automobile equipment, is the latest and probably the most interesting development offered the car-driving public," states Mr. Lane.

Eddie Riedel with Majestic

Herbert E. Young, general sales manager of the Grigsby-Grunow Company, has appointed Edgar S. Riedel, familiarly known as "Eddie" Riedel, to the position of assistant sales manager, in charge of the Majestic tube division.

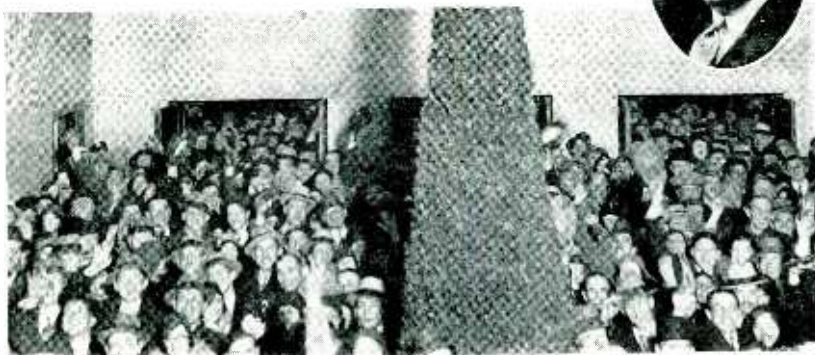
Henceforth, Mr. Riedel will concentrate his efforts on the 16 million Majestic tube replacement possibilities created by the fact that there are now 2,000,000 Majestic receivers in use.

Eddie is well-known throughout the radio industry, his sales experience dating back to the pre-console days of 1926 when he was vice-president in charge of sales with the Reichmann Company, while from April, 1927 on, he held the post of general sales manager of the Raytheon Mfg. Co., of Cambridge, Mass. More recently he was vice-president in charge of sales with Utah Radio Products Company of Chicago and Salt Lake City, makers of Utah reproducers.

Eveready Makes Statement

"Competitive lines in the radio tube field are being drawn in 1930 for the sharpest contest in the history of the industry." Paul P. Huffard, newly elected president of National Carbon Company (Eveready)

"The Love Parade"



When Walter Ferry (insert), of the May Distributing Corp., New York City, Metropolitan Philco distributor, puts on a party it is a party. Here are some of the 2,800 Brooklyn dealers who viewed the private showing of "The Love Parade" at Loew's Gates Theatre in Brooklyn—part of the sales promotional tie-up of Philco and Paramount.

declared in an interview with Detector. "As a result of our withdrawal from the glutted radio receiving set field," he continued, "our company has taken itself out of a competitive position with all set makers, who should, therefore, be disposed to view with favor sales by their set distributors of Eveready Raytheon tubes. This factor, added to the replacement possibilities, naturally increases our optimistic outlook."

Changes in RMA Board of Directors

Personnel changes among prominent executives of several radio manufacturers have resulted in several changes on the board of directors of the Radio Manufacturers Association. At the Cleveland meeting of the board resignations were received from Vernon W. Collamore, formerly of Philadelphia; George C. Furness, of New; A. J. Carter, of Chicago; Major H. H. Frost, of New York; and Jess B. Hawley, of St. Charles, Ill. Mr. Furness will continue as chairman of the R.M.A. statistics committee. Major Frost will also continue as chairman of the merchandising committee, and Mr. Hawley as chairman of the show committee.

To fill the five vacancies caused by the above resignations, the board unanimously elected to its directorate the following: A. T. Haugh, of Rochester, former president of the R.M.A.; Fred D. Williams, of New York; E. N. Rauland, of Chicago; James M. Skimmer, of Philadelphia, and Arthur C. Kleckner, of Racine, Wis.

Collamore with Radiola

RCA-Victor Company announces the appointment of Vernon W. Collamore as manager of its Radiola Division.

Mr. Collamore has had nearly twenty years' experience in the specialty selling field, the last ten of which were with the Atwater Kent Manufacturing Company, with which company he served as general sales manager. He will be in charge of sales and merchandising of all RCA Radiolas and speakers throughout the country.

E. A. Nicholas, who was formerly manager of the Radiola Division, has resigned to organize a large distributing company which will handle the Radiola line exclusively.

Celebrate Silver Anniversary of Baldwin's Work

The various plants of Nathaniel Baldwin, Inc., are observing 1930 as the twenty-fifth anniversary of Nathaniel Baldwin's entry into the field of radio research.

Mr. Baldwin, from his youth devoted to scientific experimentation and invention, made his entry into the wireless communication field in 1905, when he first became interested in developing some means of amplifying the human voice for the purpose of effectively addressing large gatherings. His first manufacturing venture was a one man shop for the production of head sets; and it was from this beginning that the present organization grew, aided by the impetus given the industry by the Great War, with its greatly increased demand for radio equipment.

Many interesting stories are told of the experiences of this radio pioneer, who still heads the organization which he founded single-handed.

Brunswick Changes Distribution Tactics

After March 1, all Brunswick merchandise of the Radio-Panatrope Division will be handled by distributors rather than through branch operations, according to a statement by Arthur A. Trostler, sales manager of radio division of the Brunswick-Balke-Collender Company.

Mr. Trostler made this statement shortly after his return to the Chicago offices from a three weeks' trip throughout the East and just prior to leaving for a protracted southern survey.

Music With a Punch



When Primo Carnera (left), the big punch and parry man from Italy, visited E. E. Bensinger, president of Brunswick-Balke-Collender in Chicago, he was entertained with music from a Panatrope. Two minutes after this photo was taken, Primo picked up the set and took it home. Oh, yes, Mr. Bensinger gave it to him.

R.C.A. Victor to Expand

An expansion program, involving the expenditure of more than \$7,500,000 during 1930, is to be undertaken at once by the R.C.A.-Victor Co., according to a statement by Edward E. Shumaker, president. More than \$5,500,000 of this sum will be spent for the construction of a new building, and for its equipment, to be used for the manufacture of radio parts. Over \$2,000,000 worth of equipment is being brought to Camden from the General Electric and Westinghouse plants.

It has been decided that not only Victor radios, Victrolas and records, but also R.C.A. Radiolas, which formerly were manufactured in the Westinghouse and General Electric plants, will now be produced in the Camden plant.

Riding the Air Waves

Eric Palmer, Jr., operator of amateur station W2ATZ, Brooklyn, is out with his first book. It is titled: "Riding the Air Waves" and is published by Horace Liveright, Inc., New York.

It deals with the short waves and international radio communication as well as the exciting experiences the "hams" undergo. It also emphasizes the importance of international broadcasts made possible by the high frequency transmission.

Where Your Friends Are

Irving K. Fearn is assistant to the president, French Battery Co. Was sales manager, Ken Rad Corp. * * * *

L. M. Gollmann has been appointed purchasing agent of the Reno Sales Co., Inc., 630 Broadway, Brooklyn, N. Y., and will appreciate receiving catalogs on electrical, radio items. * * * *

Harold W. Winningham is now in charge of sales and service, outside territory, Western Washington, for the Edison Distributing Corp., of Seattle. He was formerly sales engineer with Stewart-Warner. * * * *

F. E. Castro is now sales representative for American Bosch in Northwestern territory. Hugh Wilkins has been transferred to intermountain territory. * * * *

Arthur P. Witters is on the sales staff of Wakem and Whipple, Inc., Chicago. * * * *

Harold Eskildsen, formerly Philco sales supervisor in the Oregon territory, with headquarters in Portland, has been transferred to Seattle, Wash., where he will be in charge of sales in the downtown district. * * * *

Bruce Burlingame and Whitefield Pressinger are consolidating their interests and hereafter will operate as Pressinger-Burlingame, Inc., 130 W. 42nd St., New York City. * * * *

Walter E. Daw, Newburgh, N. Y., is now New York state representative for the Pacent Electric Company. * * * *

Stern and Company, Inc., Hartford, Conn., has been appointed distributor for Silver Radio in the entire New England territory. Company branches at Boston, Providence, and Portland will also handle the new line. * * * *

Franklin Electric Co., Atlantic City, is now distributing Silver radio in southern New Jersey. * * * *

The Phillips Distributing Company, organized to market radio parts and supplies, has filed articles of incorporation under the laws of the state of Utah. The new company will have headquarters at Salt Lake City. * * * *

Trilling and Montague, Inc., Keystone Radio Co., Inc., and Bell and Thomas, all of Philadelphia, have been made distributors for Triad tubes. R. M. Pepper, Harrisburg, Pa., has also been appointed a Triad jobber.

It's May in New England

A new organization has been formed in Massachusetts to take over exclusive distribution of Philco radio in the counties of Worcester, Middlesex and Norfolk. Its corporate name is May Distributors, Inc., with offices and warehouse in Boston, Mass., and also with warehouse in Worcester City, Mass. D. W. May is president and treasurer, George P. Wiseman, vice-president and general manager, W. L. Galt, secretary and sales manager, and Chas. Kocornick, assistant treasurer. A building of 9,000 square feet has been secured in Boston, at 797 to 805 Beacon Street. This will make the fifth unit of Philco distribution for the May organization.

For the SERVICE MAN

(Continued from page 39)

able contact which ran to the pick-up jack in the rear of the receiver and a grounding contact to which the movable contact and its lead were connected when the pick-up was not in use. This prevented radio frequency coupling between the lead from the switch to the jack and the radio amplifier stages.

As stated above, this pick-up or phonograph switch was operated by turning the volume control knob to the "off" position. Here, likewise, was a dual purpose arrangement, for when the pick-up was connected for operation the input to the radio amplifier was shut off and the gain of the radio stages greatly reduced. This prevented cross-talk between radio signals and the phonograph reproduction. It should be noted here that the audio transformer used to couple the detector to the power tube had a four-to-one turns ratio. With this complete amplifier combination the proper output was obtained from the speaker.

It was mentioned above that in certain cases when a push-pull output stage was used a first audio stage was necessitated. In the receiver incorporating this feature, conditions were complicated by the use of an automatic volume control circuit. This, and the fact that excessive amplification would be obtained, prevented the connection of the pick-up to the detector grid. Therefore, it was decided to make the pick-up connection to the grid of the first audio amplifier. This simplified the problem of the switch to some extent, as the same care in reducing capacity was not necessary as there was no radio tuned circuit to consider.

Inasmuch as the audio transformer used in the previously mentioned receiver had a 4:1 turns ratio, it can be readily seen that to obtain the same overall amplification the push-pull input transformer must have substantially the same turns ratio from each half of the secondary to the primary. Such a transformer to have a good frequency characteristic must be quite large in size as the primary must have the necessary inductance. This means that the core must be large enough to allow these large secondary windings to be mounted and that the solenoid itself will be large. Care must be taken with such a transformer to insure that the distributed capacity is not excessive, thereby damaging its high frequency characteristic. The effect of such capacity, which, of course, is necessarily present, must be worked into the design of the whole audio amplifier.

The pick-up switch in this receiver was designed to disconnect the grid of the first audio amplifier from the secondary of the audio transformer and connect it to the pick-up outfit. This switch was also arranged to operate when the volume control was turned "off," and as the manual volume control in this case was in the audio system (the automatic volume control makes the signal voltage at the detector substantially constant) the switching arrangement was designed to ground both sides of the secondary of the first audio transformer to eliminate interference from radio signals.

Thus, it can be seen that there are a number of problems in applying a pick-up jack to a screen grid receiver. Each of these problems must obviously be solved satisfactorily without affecting in any way the operation of the receiver for radio reception, and without complicating manufacturing or maintenance.

Principles of Radio

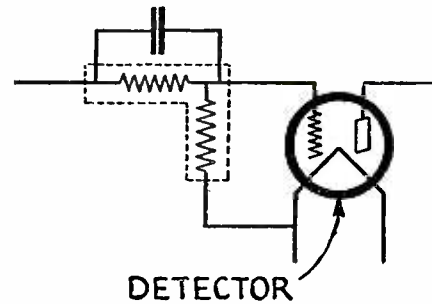
A Book Review

Keith Henney, formerly director of Radio Broadcast Laboratory, and now associate editor of the new McGraw-Hill magazine *Electronics*, is the author of "Principles of Radio" just off the presses of John Wiley & Sons, Inc., New York City. This is a text book on radio for use in schools where radio is taught as well as by the person studying without a teacher. All the experiments and problems contained in the book deal with practical problems which are met every day in radio design, construction and service. It embodies both theory and practice. Very little mathematics higher than elementary algebra is used in explaining the problems. The book contains many useful tables and, among other things, tells how to calculate the power output of a short wave oscillator, how to measure the amplification factor of a tube, how to design an audio and a radio frequency amplifier and much other information to fill the needs of the laboratory man, the service man or the experimenter. It is a very well written book of some 477 pages that should be of great help to those who wish to study radio. The intended retail price is \$3.50.

A Grid Leak Suggestion

There are two methods of employing the usual grid leak, namely, in the grid lead and shunted by the grid condenser, and again across the grid and grid return leads. The latter method is employed when there are condensers or other obstacles to the draining action of the grid leak.

In order to obtain the advantages of both methods, the scheme shown in the accompanying diagram presents interesting possibilities. A duplex clarostat is employed, since it comprises two adjustable



DETECTOR

resistances covering the necessary wide range for grid leak purposes. Remarkable sensitivity is obtained by this method, together with a certain sparkle in the tone quality due to proper leakage control. The scheme is especially worth trying these days, when many cleared channels make possible real DX reception, while on the other hand the congestion of certain waves makes it necessary to control the sensitivity of the detector by means of the grid leak.

HINTS from HANK

How can you expect a raise unless you make the service department a better paying proposition.

* * *

Every time you throw a length of wire away, just because you are too lazy to coil it up and pack it in your kit, just remember that it's lowering the profit on that service call.

* * *

Be polite at all times but try not to overtalk yourself.

* * *

A 2 mfd., 200 volt paper condenser across the line right at the set will stop a good bit, if not all, the clicks coming over the line. This is especially true in apartment houses where lights are being continually turned on and off.

You Can Hire a Telephone Pole in Manitoba

MANITOBA TELEPHONE SYSTEM

FORM 196C-1M-1-28

Application for attachment of Radio Antenna to Pole

Name

Address

The undersigned requests permission from the Manitoba Telephone System for the privilege of attaching one (1) Radio Antenna to a pole located at subject to the current rules and regulations of the Telephone Department, and agrees:—

(1) During the continuance of this agreement to pay to the Manitoba Telephone System the sum of One Dollar (\$1.00) rental per annum commencing from date of attachment, rental payable in advance.

(2) To pay to the Manitoba Telephone System the sum of Six Dollars (\$6.00) to cover labor and material cost (exclusive of Antenna wire) to erect Antenna, or if Antenna be already erected the sum of One Dollar and fifty cents (\$1.50) to cover inspection.

(3) To observe all laws, rules and regulations pertaining to Radio Stations insofar as they shall affect said attachment.

(4) To indemnify and save harmless the Manitoba Telephone System from all claims, actions or other proceedings by whomsoever made, arising out of or connected in any way with said attachment.

(5) The Manitoba Telephone System agrees to erect or inspect, as the case may be, Radio Antenna on its pole in accordance with its recognised standards of construction and to make necessary repairs at the connection, exclusive of Antenna wire breaks during the term of this contract.

(6) This agreement shall continue and be in force until cancelled by either party giving the other ten days' notice in writing.

Accepted: Date

..... Signed

Com'l. Manager.

The above form is used by the Manitoba Telephone System, Canada, in carrying out its policy of attaching radio antennas to its poles. The installation fee is \$6, plus a rental charge of \$1 per year. About 3,000 set owners are taking advantage of this service.

The Great Martin Mystery

(Continued from page 31)

for the shock your methods have caused to his nervous system, \$10,000 for loss of his wife's services also due to said shock, \$5,000 for loss of musical entertainment during the past four and a half months, and \$38.50 for cash advanced by Mr. Sanderson to you.

Mr. Sanderson tells us that, to save time and court costs, he will settle with you out of court for \$20,000. We respectfully urge you to seriously consider his kindness. Failing to hear from you by September 30, we will bring suit without further notice.

Truly yours,

O'BRIEN, LEVY, MULLIGAN and HOROWITZ.

Josiah Brown, M.D.
Geronimo City

September 26, 1929.

My dear Dave:

Thanks for the \$75. But Dave, paying my bills won't cure your nerves. I saw the letter you sent the "Gazette" yesterday—that sort of language is inexcusable, old man. I explained things to them, though, and they got over it. I'll see Sanderson too. Lay off that veranol! Take the hypophosphites and the bromides—but, more than bromides and hypophosphites, you need a couple of *real service men*. Hold it, old boy, hold it!

Cordially and sincerely, *Josh*.

September 28, 1929.

My dear Dave:

I was out to Rain-In-The-Face last night, doctoring Sanderson's girl, Dorothy, for whooping cough. He's willing to listen to reason—especially after I told him about the shape you were in. Why don't you send out that new chap—that graduate of the accredited service training school?

Cordially and sincerely, *Josh*.

September 29, 1929.

Dear Martin:

When Doc was out last night for my girl, Dorothy, he told me about the fix you were in. Let's start all over again, old man. Send out that service graduate Doc was talking about—let's see what happens.

Sincerely,

Sanderson.

P. S.: Say, young Charlie Brown just dropped in with the 227 tube from the Doc's Model 13 Hallelujah and when he put it into my set the b-r-r-r-r-r-p—b-r-r-r-r-r-p—b-r-r-r-r-r-p—stopped right away and the set played fine. Do you think that tube might have been causing the trouble?

September 30, 1929.

My dear Sanderson:

Thanks for your phone call, old man. I'll be all right as soon as I can sort of get myself together. It does seem reasonable to assume that the 227 tube might have had something to do with it. But I'm sending down my new service chief, Dick Knight, who is a graduate of an accredited service trade school—no more Schmalhausens, Scavengas, et cetera for me.

Cordially,

Martin.

October 1, 1929.

My dear Martin:

It was the 227 tube, all right. Your man Knight located the trouble in two shakes. Why couldn't Schmalhausen and Scavenga and all the others have done that?

I owe you \$180, don't I, for my Model 13 Hallelujah? If I pay the whole amount in one smack I get 6% off—right? Let me know, will you—and I'll send my check for \$169.20 right away.

Cordially yours,

Sanderson.

N38 KX OCT 1 1028A
DAVID MARTIN

167 69 71 BOND ST GERONIMO CITY ARIZ
TO CELEBRATE SECOND ANNIVERSARY HIRAM SMITHER'S PRESIDENCY HALLELUJAH MANUFACTURING COMPANY ANNOUNCES MODEL THIRTEEN HALLELUJAH REDUCED TO SENSATIONAL NEW LEVEL OF NINETY FIVE DOLLARS STOP FULL PAGE AD TOMORROW IN GERONIMO CITY GAZETTE BRINGS TIDINGS OF GREAT JOY TO GERONIMO

CITY AND SURROUNDING TERRITORY NO REBATES
POSSIBLE SORRY BEST WISHES FOR SUCCESS
HALLELUJAH MANUFACTURING COMPANY

* * *

Thus ends the narrative tossed up by a storm-swept sea.

These letters, together with the tufts of David Martin's hair found scattered about his office, and his set of false teeth found twenty-five feet from his desk . . . these are all that remain to offer a clue to his mysterious disappearance.

What was the fate of David Martin?

What was its cause?

How'd you like to go sleigh-riding?

It's A Sale!

(Continued from page 19)

"At this point it might be well to remark, however, that ours is not a hard-boiled policy by any means. There are circumstances under which a home demonstration means a sale. You can usually figure out whether or not this is the case where you know your customer. But in general it is best to let it be known that your policy is that of no home demonstrations.

"Well, here is how that policy has worked out for us. We found immediately that we had to carry but 35 per cent of our previous inventory. Our showroom here has one model of each receiver of the various lines that we handle. All are in good working condition so that the customer may get just as good an idea of what the reception will be like here as at his or her home. We have also found that instead of carrying a \$5,000 stock of tubes we now only need to carry a \$1,000 tube stock.

"Of course, it means that the salesmen have to do all their selling on the floor—practically all of it—and that takes a higher type of salesmanship. But they have a strong sales argument in that they can assure the customer that when he gets a set it is really a new set, not one that has been sent all around town to various homes and has been perhaps even refinished and repaired. In other words, when we deliver a radio set we deliver a brand new one right out of stock. *And when we do deliver one—it's a sale.*

"The salesmen like this routine better because they have more time to concentrate on prospects that look as if they meant business. Also they don't have to waste their time chasing all around town as before. And it relieves us of a lot of bookkeeping necessary when you have to keep track of what sets are out on demonstration. Local newspaper advertising and direct mail is used by us to good advantage in getting the customers in the store.

"There is no reason in our minds why the majority of sales should not be made right in the store. That is what the store is for, and it is up to the dealer to fix the display room attractively enough so that customers will come in and be able to make up their minds one way or the other before departing. Last year we did a gross business in excess of \$200,000 and although our gross will probably be less this year, we fully expect our net profits to be greater.

"So we have found that in eliminating the 'joy rider' we have managed to put a little bit of the joy back into the radio business."

Profit during "Summer Slump" by selling WILLIAMS ICE-O-MATIC ELECTRIC REFRIGERATORS

From your own experience, Spring and Summer months are least profitable for radio retailers. Here is a new idea—yet a practical, sensible one—that will make you more money during approaching hot weather.

Williams Ice-O-Matic Electric Refrigerators are sold to the same class, very often the same prospects, to whom you have sold radios. With a Williams Ice-O-Matic franchise in your safe, you would have the added advantage of selling in a new yet fully developed field. Think of freeing your salesmen from trade-in problems and cut-price competition.



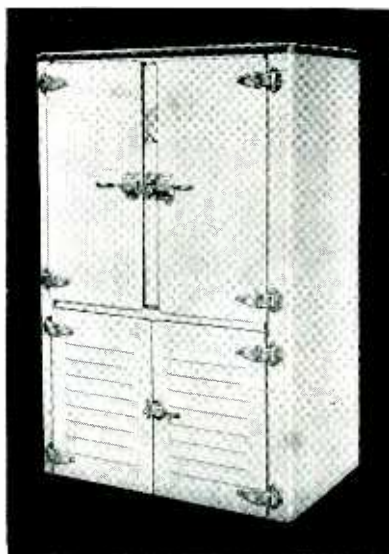
NEW
CAPITOL
MODEL



NEW CAPITOL MODEL

\$175 list price

also larger types



Ice-O-Matic Model P-6

Changing markets bring decreasing profits. Foresighted radio dealers are investigating this new Williams Ice-O-Matic proposition. Get the facts, then decide whether it will make more money for you and your salesmen during the coming Spring and Summer months. Write or wire now *in confidence* for complete information on new low-priced Ice-O-Matic Capitol line and the Williams Sales License for your community.

In addition to national magazines, Williams Ice-O-Matic is advertised to the buying public over the radio by *these four programs weekly*:

SUNDAY EVENING, 7:30 to 8:00 (Eastern Time) NBC Chain, WJZ, WBZA, WBZ, WLW, WHAM, WJR, WGN,

KWK, WREN, KOA and KSL.

WEDNESDAY EVENING, 7:30 to 8:00 (Eastern Time) KDKA.

THURSDAY EVENING, 7:30 to 8:00 (Central Time) WGN.

SATURDAY EVENING, 8:00 to 8:30 (Pacific Time) KFRC, KMJ and KHJ.

Address Ice-O-Matic Division
WILLIAMS OIL-O-MATIC HEATING CORPORATION
Bloomington, Illinois

ICE-O-MATIC IS BUILT AND BACKED BY WILLIAMS OIL-O-MATIC
WHOSE OIL BURNERS ARE HEATING FAR MORE HOMES THAN ANY OTHER!

A NEW CHAMPION WITH A LOCALIZED



DE LUXE MODEL
\$42⁵⁰



**HANDY
CLEANER**
\$13⁵⁰

Sold as the little companion to the larger models

Other General Electric Cleaners
STANDARD MODEL \$35⁰⁰ JUNIOR MODEL \$24⁵⁰



The newspaper smashes appear over your own name. They will get attention—and will direct prospects to your store.

Dominant space in Saturday Evening Post and other consumer magazines helps you to make sales on G-E Cleaners.

G-E Cleaner folder helps you sell G-E Cleaners. Ideal for enclosing with statements and packages and for over-the-counter distribution. Makes sales for you!

Send the coupon for your copy of the G-E Cleaner Sales Plan Book. New—helpful—complete!

GENERAL ELECTRIC COMPANY
Merchandise Dept., Section V-603,
Bridgeport, Conn.

Send me details of G-E Cleaner Sales Plan and information about the new De Luxe Model.

Name _____

Address _____

City _____ State _____



MERCHANDISE DEPARTMENT • GENERAL ELECTRIC COMPANY • BRIDGEPORT, CONNECTICUT



GENERAL ELECTRIC

MERCHANDISE PRODUCTS

AMONG CLEANERS

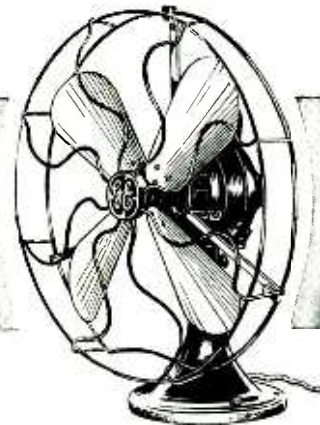
SALES PLAN BEHIND IT

GENERAL ELECTRIC has added to its line of superior cleaners a De Luxe Model which excels in dirt removal efficiency—your prospects will marvel at the powerful suction and extreme ease of operation of this new de luxe General Electric Cleaner. They will appreciate its beauty, for it combines exceptionally high quality and appearance with supreme cleaning ability. *Low in price*, it also combines 14 sales points in one outstanding value.

The April issues of *Good Housekeeping*, *Woman's Home Companion* and the March 29th issue of the *Saturday Evening Post* will announce the new de luxe General Electric Cleaner in full page smashes in color. In addition a series of forceful, dramatic newspaper ads have been prepared to feature General Electric Cleaners locally. They will direct prospects to your store, if you make arrangements now with your General Electric Merchandise Distributor.

To support this consumer advertising program, we offer new G-E Cleaner folders for general distribution, window and store display material and local newspaper advertising. Ask to see the ultra-modern SALES STAND, which provides an illuminated Cleaner Department in only 5 square feet of floor space. Everything is ready that you need to help you sell General Electric Cleaners this spring—in large volume.

Merchandise General Electric Cleaners the modern way. Feature the new De Luxe Model—sell the entire line. Make real cleaner profits this spring, by selling *high cleaner quality at a low price*. Get in touch with your General Electric Merchandise Distributor NOW. Keep in step with the times!



**To sell G-E Fans
this Summer—
PLAN NOW**

The G-E Fan campaign for 1930 assures greater sales for G-E Fan dealers. General Electric crashes through with the most extensive fan advertising campaign ever scheduled. Page ads in four colors appear in *Liberty*, *Collier's* and *Saturday Evening Post*. Whether or not you got your share of 1929 fan business, now is the time to plan for getting it *this summer*. You can do it easier with G-E Fans.

MERCHANDISE DEPARTMENT • GENERAL ELECTRIC COMPANY • BRIDGEPORT, CONNECTICUT

GENERAL ELECTRIC

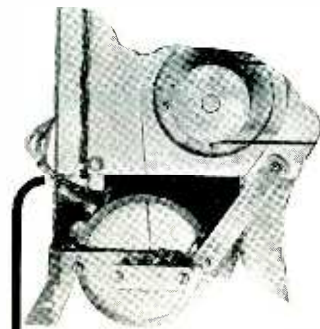

MERCHANDISE PRODUCTS

The Successful Sets

For 1930 Will Be Those Equipped with

KINEMATIC Multiple REMOTE CONTROL

*Vernier Dial Tuning to All Stations
Regulates Volume—Switches On and Off*
FULL CONTROL from EVERY BOX



Compact Radio Set
Control Mechanism



Living Room
Control Box



Bed Room
Control Box



Up-Stairs
Control Box

HERE is the first big advance in radio since the introduction of A. C. operation—the new radio convenience that every set-buyer will demand of 1930 receiving sets—

REMOTE dial tuning that brings in not half-a-dozen stations but every station, local or distant, with vernier tuning—remote control of volume—remote switching to turn the set on or off—complete control at every control box—multiple remote control so that two or three or a dozen control boxes can be installed.

KINEMATIC is the name of this multiple remote control system, developed by the Sleeper Research Corp.

WHEN you see it in action on the new 1930 sets you will understand why distributors and dealers are dropping old franchises to take on lines of the companies which are licensed to build Kinematic controls into their sets.

AND when your customers see Kinematic-controlled sets in your store, you will understand why, to meet competition this season, you must get a franchise for a line of Kinematic-equipped radio sets.

ACT NOW! Don't wait for vague promises, for the Kinematic system is the only multiple remote dial control that is actually perfected and in production by radio set manufacturers.

The Greatest Selling Feature Since A.C. Socket Operation

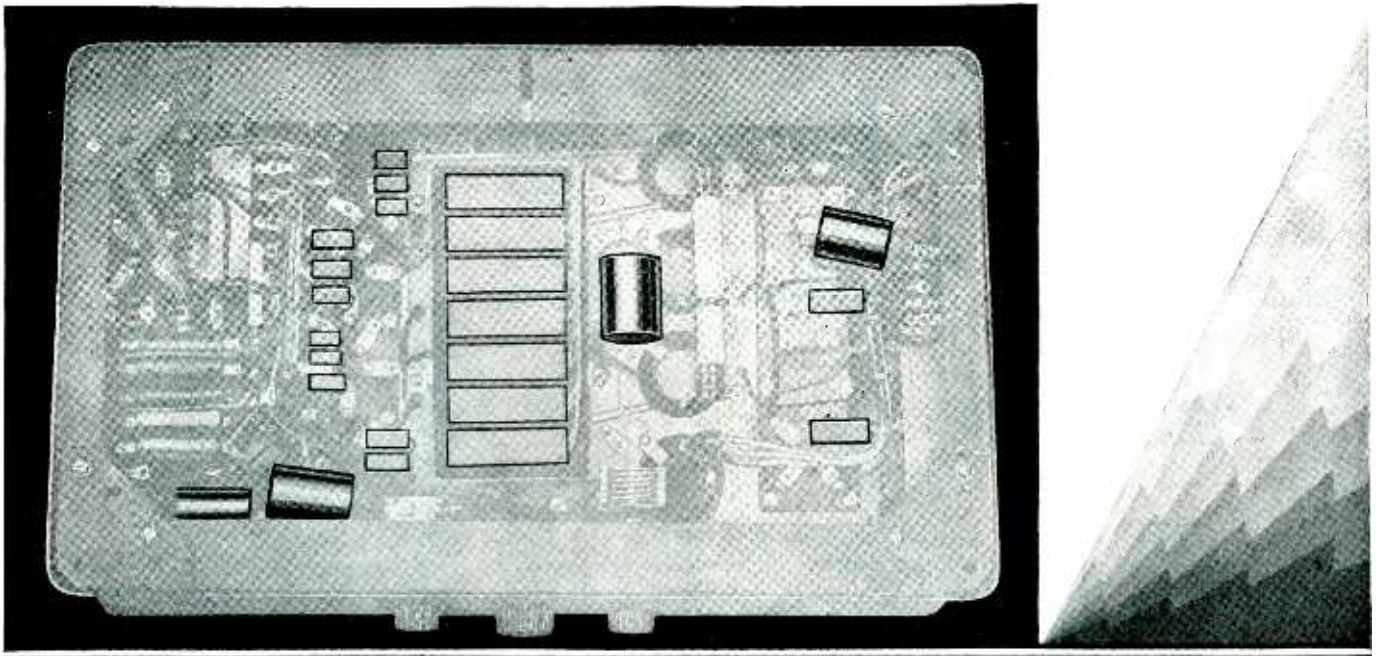
For further information, write or wire to

SLEEPER RESEARCH CORP.

416 W. 33d STREET

NEW YORK CITY

THE METAL THAT IS "TUNED" TO RADIO



IF ONE OF THESE 24 POINTS IS WEAK...BACK COMES THE SET

The most vulnerable parts of any radio set are the fixed condensers. It is trouble here that brings most sets back to your store.

Make sure the condensers in the sets you sell are made of the most efficient and durable materials. You are in the business to sell radios, not to take them back.

Leading radio manufacturers now standardize on Alcoa Aluminum Foil for fixed condensers. They have learned that aluminum has the highest electrical conductivity, weight for weight, of any material used in set building. And Alcoa Aluminum Foil

is extremely light, durable, non-corrodible and uniform in thickness. There is little likelihood that it will be creased or torn in winding. Due to its light weight there is less strain on supports.

Today, radio competition is keen. You want all the selling help you can get. Alcoa Aluminum used in fixed condensers, variable condensers, shielding, wire and cast parts is helping to sell radios for many dealers. Buy your radios from the manufacturers that use it. ALUMINUM COMPANY of AMERICA; 2462 Oliver Building, PITTSBURGH, PENNSYLVANIA. Offices in 19 Principal American Cities.



ALCOA ALUMINUM

FOR RADIO

A Short . . . True Story about Tubes.. and Your Profits.

READ IT..!

OVERTIME — every night. The big 3½-acre CeCo factory is busy always . . . turning out over 17,500 perfect radio tubes daily. CeCo quality started this increasing demand . . . and the growing volume is cutting our costs . . . and giving dealers a new profit opportunity.

CeCo — now the largest exclusive maker of radio tubes — has special equipment and methods that no other tube-maker knows about. Two CeCo processes are secrets . . . known only to its 42 development engineers and research experts.

Today, CeCo provides a line of radio tubes that equal or surpass in quality, tone and length of life, the product of any other tube-maker.

A final examination by two "Quality Engineers" assures dealers that only perfect tubes bear the CeCo label.

A 300% increase in volume has cut costs to a level not attained by most tube producers. This volume has made improved equipment possible . . . and brought research facilities to every step of tube making in the million dollar CeCo plant.

CeCo quality is recognized by the U. S. government . . . thousands are purchased yearly. 10,000,000 CeCo Tubes are now in use.

Wire or write to the CeCo Manufacturing Company, Inc. for information about our attractive retail profit plan. It's making real money for a growing list of big, successful retail stores.

CeCo is broadcasting a tremendously popular radio program every Monday night over the Columbia chain of 22 stations. This effective advertising is showing remarkable results in increasing CeCo sales.

22,000 enthusiastic listeners wrote to CeCo in one week. Tune in next Monday evening at 8:30 P. M. Eastern S. T.



CeCo tubes are licensed under patents and applications of the Radio Corporation of America, the General Electric Company and the Westinghouse Electric and Manufacturing Company.

CeCo MANUFACTURING COMPANY, INC.
1200 Eddy Street, Providence, R. I.

CeCo

RADIO TUBES



*THE MEN WHO DIRECT
THE DESTINIES OF THE
RCA VICTOR
COMPANY INC.*



RCA VICTOR COMPANY INC.

THE RCA VICTOR COMPANY, INC., was created to take over the research, engineering and manufacturing of radio and phonograph products of the General Electric Company, the Westinghouse Electric & Manufacturing Company, the Victor Talking Machine Company and the Radio Corporation of America.

These great organizations have pioneered all major developments in radio communication and sound reproduction.

Those who direct the destinies of the new RCA Victor Company, Inc. include: men who have attained preëminence in finance and industry, chief executives of the country's foremost radio and phonograph builders, and leaders of the largest electrical manufacturing organizations in the country.

The high standing of the men who comprise this Board of Directors is a guarantee of the integrity, stability and future of the RCA Victor Company, Inc.

ACKNOWLEDGED LEADERSHIP

The executive, engineering, manufacturing and merchandising officials of the RCA Victor Company, Inc.—who will design, build and sell the VICTOR and RADIOLA lines—who will direct the growth of this great organization—are the picked men of the industry.

Victor Radio with Electrola, Victor Records, the Orthophonic Victrola, the Radiola, the Radiola in combination with Phonograph, RCA Centralized Radio Equipment and Broadcast Transmitters—will continue to be the acknowledged leaders in their fields, this year, and in the years to come.





DIRECTORS



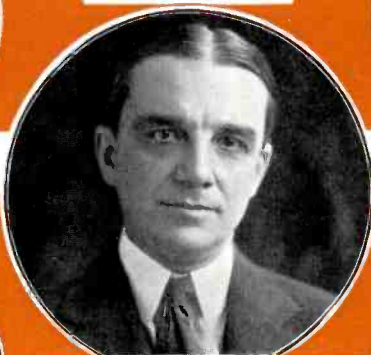
ANDREW W. ROBERTSON
Chairman of the Board
Westinghouse Elec. & Mfg. Co.



GERARD SWOPE
President
General Electric Company



DAVID SARNOFF
President
Radio Corporation of America



OWEN D. YOUNG
Chairman of the Board
General Electric Company



E. E. SHUMAKER
President
RCA Victor Company, Inc.



FRANK A. MERRICK
President
Westinghouse Elec. & Mfg. Co.



GENERAL J. G. HARBORD
Chairman of the Board
Radio Corporation of America



H. P. DAVIS
Vice-President
Westinghouse Elec. & Mfg. Co.



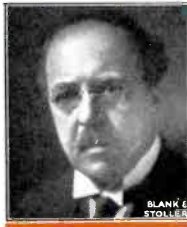
W. R. HURROWS
Vice-President
General Electric Company



CORNELIUS N. BLISS
Chairman of the Board
Bliss, Fabyan & Co., Inc.



FREDERICK STRAUSS
Senior Partner
J. & W. Seligman & Co.



ALBERT G. DAVIS
Vice-President
General Electric Company



HON. JAMES R. SHEFFIELD
Sheffield & Berts



EDWARD W. HARDEN
Director
Radio Corporation of America



J. L. RAY
Vice-President
RCA Victor Company, Inc.



A. WEILAND
Vice-President
RCA Victor Company, Inc.



OFFICERS & STAFF



J. E. LAMBERT
Vice-President and
General Counsel



J. L. RAY
Vice-President in Charge
of Sales



H. C. GRUBBS
Vice-President
Victor Division



V. W. COLLAMORE
Manager
Radiola Division



QUINTON ADAMS
Manager
Engineering Products Division



EDWARD E. SHUMAKER
President



A. WELLAND
Vice-President and
Works Manager



W. R. G. BAKER
Vice-President in Charge
of Engineering



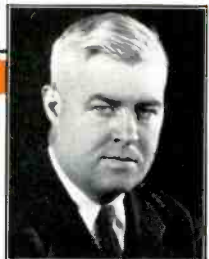
F. C. GRIMLEY
Treasurer and Comptroller



W. L. MARSHALL
General Advertising
Manager



E. K. MACEWAN
Secretary



R. P. ALEXANDER
Assistant Treasurer



P. G. MCCOLLUM
Assistant Comptroller



E. F. HAINES
Assistant Treasurer



F. S. KANE
Assistant Secretary



W. H. HUNT
Assistant Secretary



F. R. DEAKINS
Assistant to President



C. G. TERWILLIGER
Assistant Treasurer



DR. FRANCES ELLIOTT CLARK
Manager
Educational Activities

RCA VICTOR COMPANY INC.



ENGINEERING DEPARTMENT

G. W. CARPENTER
Division Engineer
Receivers

L. W. CHUBB
Assistant to Vice-President

E. W. ENGSTROM
Division Engineer, Photo-
phone and Special Applications

F. C. BARTON
Division Engineer
Records and Recording

W. F. DIEHL
Division Engineer
Test Methods & Equipment

W. R. G. BAKER
Vice-President in Charge
of Engineering

B. R. CUMMINGS
Division Engineer
Transmitters

A. F. MURRAY
Division Engineer
Advance Development

C. A. WILDSWORTH
Division Engineer
Drafting

H. SADENWATER
Division Engineer
Field Engineering

W. B. STEVENSON
Division Engineer
Cabinets

A. V. LOUGHREN
Engineer
Tuned Radio Frequency

W. L. CARESON
Superheterodyne Engineer

WALLACE JAMES
Division Engineer
Tubes

J. E. ALBRIGHT
Loudspeaker and
Magnetic Pickup Engineer

J. I. CORNELL
Receiver Power Supply
Engineer

N. R. JONES
Designing Engineer
Receivers

C. M. SINNETT
Phonograph Engineer

C. D. HAIGIS
Misc. Rec. & Centralized
Radio Engineer

E. B. PATTERSON
Auditorium Equipments
Engineer

C. N. REIFSTECK
Assistant Division Engineer

E. W. KELLOGG
Recorder Engineer

C. J. YOUNG
Tube Application Engineer

R. P. MAY
Home Talking Movie
Engineer

I. WOLFF
Acoustic Engineer

W. A. TOLSON
Television Engineer

G. L. BYERS
Circuit Development
Engineer

H. F. ELLIOTT
Designing Engineer



MANUFACTURING DEPARTMENT



E. T. KREEFER
General Superintendent



N. R. DONOHOE
Manager of Purchases



R. J. TOLLER
Quality Manager



A. WEILAND
Vice-President &
Works Manager



G. R. SCHENK
Assistant Production
Engineer



N. E. WINDELICH
Chief Engineer of Products



J. W. BURNISON
Production Manager



F. L. CRAGHER
Chief Process Engineer



T. L. ACKER
Special Assistant to Vice-
President & Works Manager



N. H. LAWTON
Assistant Manager of
Purchases



L. A. DELANEY
Production Engineer



S. T. MCCLEARY
Employment Division



L. J. MITCHELL
Chief Dispatcher



E. A. DRAN
Superintendent Cabinet
Division



E. J. KELLY
Assistant Superintendent
Cabinet Division



E. J. FLEMING
Superintendent Production
Engineering Shops



W. J. MITCHELL
Chief Engineer
Power, Heat & Light



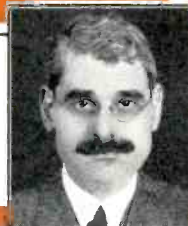
Geo. H. HALL
Superintendent
Oakland Factory



W. W. MOYER
Superintendent Metal
Manufacturing Division



C. F. NORKUS
Assistant Superintendent
Metal Manufacturing Div



R. HORST
Plant Engineer



C. A. MCCLUNG
Chief of Time Study
and Estimating



L. F. LARUE
Manufacturing Engineer



E. D. DAWSON
Tool Engineer

RCA VICTOR COMPANY INC.



RADIOLA & ENGINEERING PRODUCTS DIVISIONS

Central Logo: RCA

Top Level:

- A. B. C. SCHEIN, Manager of Radiola Foreign Department

Second Level:

- V. W. COLLAMORE, Manager Radiola Division
- QUINCY ADAMS, Manager, Engineering Products Division

Third Level:

- I. M. REEDY, Export Sales Manager
- E. H. VOGLER, Assistant Manager Advertising Department

Fourth Level:

- G. H. KILEY, Sales Manager Radiola Division
- J. G. MACKENTY, Assistant to Vice-President

Fifth Level:

- A. R. BEYER, Radiola Division
- J. P. JUDER, Manager, Farm and Rural Sales Department

Sixth Level:

- W. W. GRAHAM, Manager Technical Service Radiola Division

Seventh Level:

- G. D. NELSON, Radiola Division
- M. S. TINSLEY, District Manager Southwestern District
- P. BOUCHERON, District Manager Southern District
- L. R. GALVIN, Assistant Manager Advertising Department

Eighth Level:

- P. G. FARRER, District Manager Central District
- L. W. YULE, District Manager Pacific District
- G. F. COLP, Sales Manager Centralized Radio
- G. E. CHASE, Sales Manager Broadcast Transmitter
- R. V. BESHGETOOR, Sales Manager Component Parts
- R. H. HOLMES, Sales Manager Special Contract

Ninth Level:

- W. F. DWLEY, Order Service & Methods
- B. C. McDONALD, Assistant District Manager
- DEAN A. LEWIS, Assistant District Manager Central District
- A. B. MILLS, Assistant District Manager Southern District
- F. S. GARDNER, Assistant District Manager Southwestern District
- J. M. SWYER, Assistant Manager, Engineering Products Division

RCA VICTOR COMPANY INC.



VICTOR DIVISION

D. P. MITCHELL
Manager of Export

W. W. CLARK
Manager Record Activities

R. A. FORRES
Manager of Instrument Sales

E. D. MARKER
Manager of Trade Service

H. C. GRUBBS
Vice-President in Charge of Victor Division

B. L. ALDRIDGE
Manager of Instrument Distribution

A. A. BRANDY
Manager of Sales Promotion

CHAS. O'CONNELL
Manager of Advertising

G. D. SHEWELL
Manager of Special Musical Instruments

DR. FRANCES E. CLARK
Manager of Educational Activities

W. G. GARLAN
Assistant Manager of Export

J. F. MCGARREY
Manager of Technical Service

G. L. RICHARDSON
District Manager (Southeastern District)

W. G. PORTER
Manager of Record Sales

R. E. KANE
District Manager (Central District)

R. A. BARTLEY
District Manager (Northeastern District)

R. R. SOOY
Manager of Recording

R. P. HAMILTON
District Manager (Southwestern District)

C. C. GENHARD
Asst. Manager of Technical Service

C. CAIRNS
Manager of Artist and Repertoire

R. P. WETHERALD
Manager of Record Distribution

F. G. HAWKINS
District Manager (Northwestern District)

H. C. DARNELL
Manager of Copyright

H. E. GREEN
Assistant Manager of Advertising

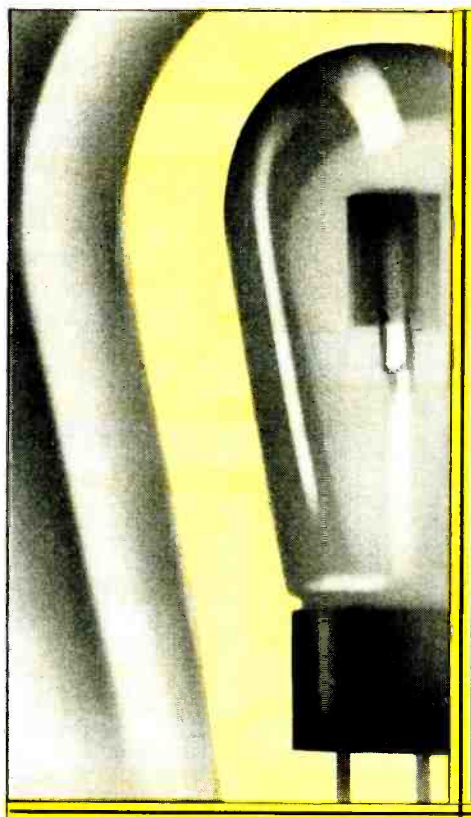
NATHANIEL SHILKRET
Musical Director

ROSARIO BOURDON
Musical Director

LEONARD JOY
Musical Director

LEROY SHIELD
Musical Director in Charge of Hollywood, Calif., Activities

Here's your Service Man's TUBE



ASK your service man about Gold Seal Tubes. He's the chap that stands the gaff when tubes go bad in sets—and he has to do the explaining and the adjusting.

He will tell you that Gold Seal Radio Tubes are known for their straight line efficiency, and if you don't talk radio language he will tell you that that means they don't get tired easily: they stand up in service; that their emission characteristic is nearly as great at the end of their life as it was at the beginning.

The sound of a radio tube depends primarily on this single characteristic. You can't see it; you can't prove it in advance; but you can prove it beyond the shadow of a doubt by the satisfaction of your customers. Gold Seal Tubes protect your reputation—and your sales. Find out about territories and terms right now.

GOLD SEAL ANTI-DEPRECIATION TUBES

Some Exclusive Territories
Still Open. Mail The Coupon.



*A Tube for
Every Set
and Every Socket*

GOLD SEAL ELECTRICAL CO., Inc.
Dept. 2-A, 250 Park Ave., New York

I'm ready to be shown, if you can help me make money in the tube business. Send me your dealer jobber proposition.

Name

Address

SPEED



1930's OUTSTANDING RADIO TUBE

SPEED with the SPEED Tube Line. It's right—right in quality, right in price. Each sale induces repeat business. **Q** SPEED Tubes incorporate new developments—months ahead of competition.



The fastest operating 227 A.C. detector.
Newest developments in 224 A.C.
shielded grid tube.

A Smashing advertising campaign of full pages in Saturday Evening Post, leading magazines and newspapers throughout the country will Speed SPEED sales. **Q** Get all details at once. It's a great proposition and now's the time for the ringside seats!

CABLE RADIO TUBE CORP.
84-90 NORTH 9th STREET :: :: BROOKLYN, N. Y.



Features of the Jewell 199

- 1 Makes every essential field test.
- 2 Endorsed by manufacturers and engineers.
- 3 Used by largest radio service organizations.
- 4 Simple to operate.
- 5 Backed by the most complete data service.
- 6 The most popular radio set analyzer.

Dealers' Price
\$73¹²
 List Price. \$97.50

Good Service Equipment Pays

It Is the Correct Foundation for Good Service

THE Jewell Pattern 199 Set Analyzer is built to the specifications of service men. It is a marvel of simplicity—easy to operate—yet it provides every essential test for checking receivers in service.

Instruments, switches, binding posts, panel, case, and plugs are of the best. The Jewell 199 is built to the highest standards throughout, yet it is the lowest priced complete radio service kit on the market.

The price of the Jewell Pattern 199 is so reasonable that no good service man can afford to be without it. In the hands of a good service man it quickly pays for itself many times over.

But the service man who does not have a 199 pays for it over and over again in wasted time, costly service, troublesome complaints, and loss of business due to dissatisfied customers.

Order a Jewell Pattern 199 from your jobber and pave the way to increased sales as well as service profits through the superior performance it provides.

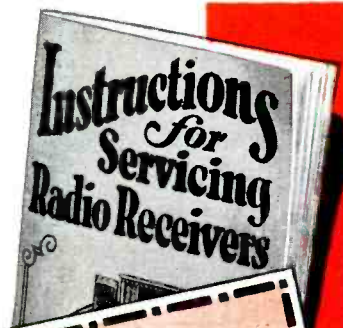


THE Jewell Pattern 199 is backed by the most thorough and complete radio data service. Revised instructions books containing data on new sets are furnished the owners of Jewell Pattern 199's at frequent intervals. This data plus the Jewell Chart Method of Set Analysis takes the guesswork out of set servicing. That is why America's most successful sales and service organizations have adopted Jewell Set Analyzers.

FREE

To Service Men

The latest edition of the Jewell booklet, "Instructions for Servicing Radio Receivers" contains data on 139 of the most popular sets. Mail the coupon for your copy.



Jewell Electrical Instrument Company
 1642-A Walnut Street, Chicago, Illinois

Please mail free a copy of your Instruction and Data Book together with descriptive literature on Jewell Set Analyzers.

Name _____

Address _____

30 YEARS MAKING GOOD INSTRUMENTS

JEWELL

JEWELL

199 Set Analyzer

63 *out of* 100 *in* DAVENPORT

IN Davenport, Iowa, there are 12,202 families who buy from local merchants—and 7,824 of them read *The American Weekly* every Sunday.

In Braddock, Pa., 3,801 of the 6,889 families read *The American Weekly*—in Riverside, Calif., 2,836 out of 5,042, and in North Adams, Mass., 2,138 of the 5,283 families regularly read *The American Weekly*. And so it goes right across the continent—influencing the greatest possible number of families. Read carefully the panel at the right—think what that enormous circulation means to merchants everywhere.

This magazine is the most important advertising medium in the world because it has the largest circulation in the world. With 6,000,000 copies each week, it is *twice as big* as any other publication.

When a manufacturer's advertising appears in *The American Weekly*, display his goods prominently, and get a good-sized slice of the new sales it will create.

What is

The American Weekly?

The American Weekly is the magazine distributed through seventeen great Sunday newspapers from seventeen principal American cities. It concentrates and dominates in 536 of America's 812 towns and cities of 10,000 population and over.

IN EACH OF 185 CITIES IT REACHES ONE OUT OF EVERY TWO FAMILIES.

IN 132 MORE CITIES, IT REACHES 40 TO 50%.

IN AN ADDITIONAL 102 CITIES, IT REACHES 30 TO 40%.

IN ANOTHER 117 CITIES, IT REACHES 20 TO 30%.

—but that's not all. Nearly 2,000,000 additional families in thousands of other communities regularly buy *The American Weekly*—making the unprecedented national total of 6,000,000 families who read *The American Weekly*.

THE AMERICAN
Greatest Circulation in the World
AWEEKLY

Main Office: 9 East 40th Street, New York City

Branch Offices: WRIGLEY BLDG., CHICAGO . . . 5 WINTHROP SQUARE, BOSTON . . . 753 BONNIE BRAE, LOS ANGELES . . . 222 MONADNOCK BLDG., SAN FRANCISCO . . . 12-231 GENERAL MOTORS BLDG., DETROIT . . . 1138 HANNA BLDG., CLEVELAND . . . 101 MARIETTA ST., ATLANTA



1906
1930

3
out of
5
service calls

De Forest
AUDION
424

De Forest "high vacuum" Screen Grid Audion No. 424, a noteworthy development of the De Forest Laboratories in 1929.

When a set is giving trouble, the service man looks, first, for faulty tubes. And according to a leading magazine devoted to the radio industry—three cases out of five the trouble is *found* in the tubes.

How many calls due to faulty tubes have you had in the past year? What did these calls cost you? It is of the utmost importance for radio set dealers to eliminate these costly calls as far as possible, if full profits are to be enjoyed.

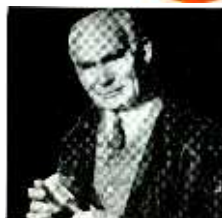
While even the best tubes are not a cure-all for all radio troubles, De Forest Audions,

because of their higher vacuum and sturdy construction, are the acknowledged friends of the service men. As one set dealer told us, "when my men find De Forest Audions in a set, they look for trouble somewhere else."

Service men, who are out on the firing line, can always feel that they have, in De Forest, a backing of complete cooperation. Our Engineering Department is ready at all times to supply data or any specific information bearing on their problems.

Write to our home office and your letter will receive prompt and intelligent attention.

de Forest **AUDIONS**



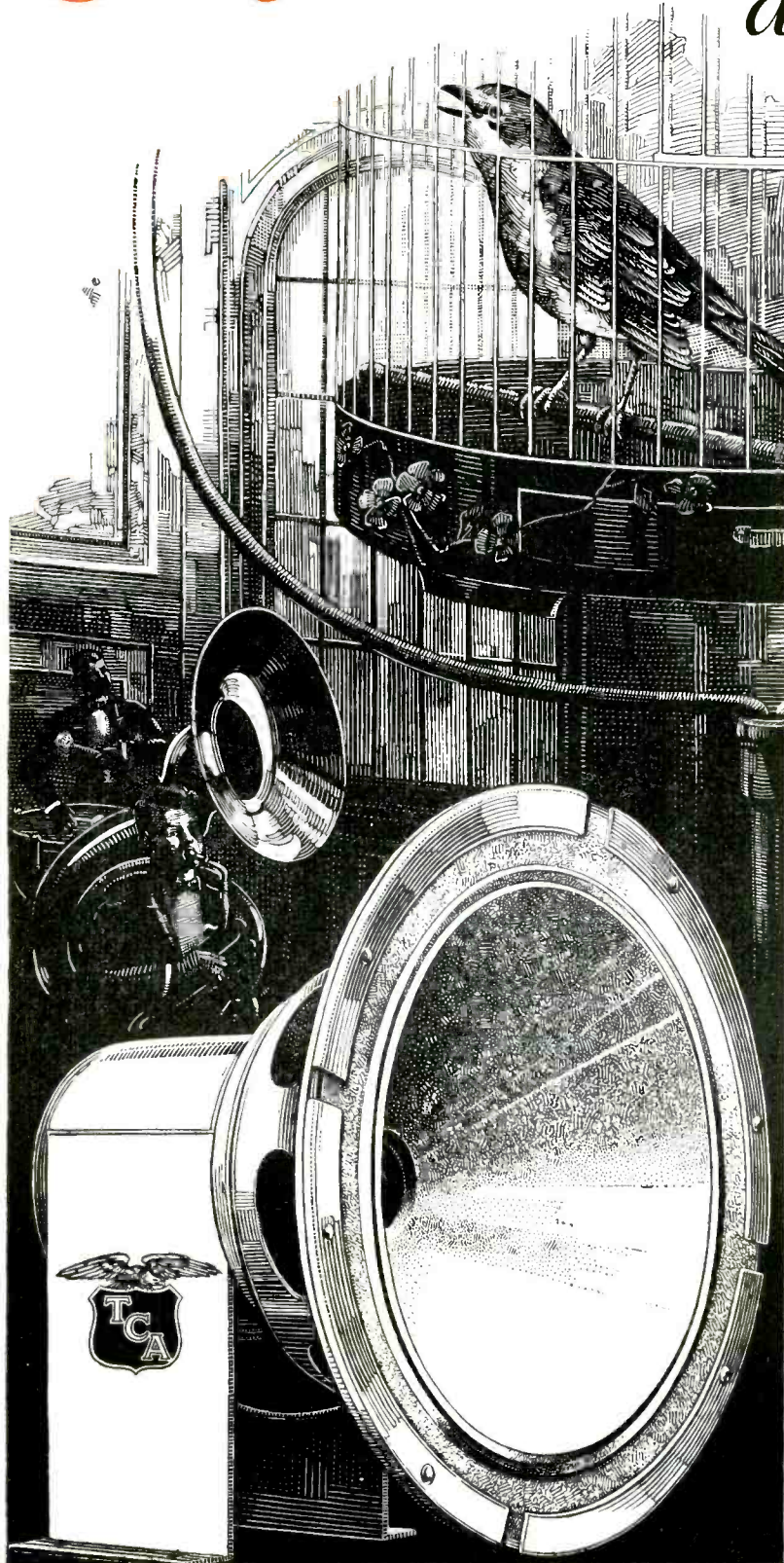
Dr. Lee De Forest, whose invention of the radio vacuum tube in 1906 made radio broadcasting possible.

DE FOREST RADIO CO., PASSAIC, N. J.

Branch Offices Located in

Boston, New York, Philadelphia, Atlanta, Pittsburgh, Chicago, Minneapolis, St. Louis, Kansas City, Denver, Los Angeles, Seattle, Detroit, Dallas, Cleveland

Range FULL-TONED and rich



If studio programs were planned to fit the limitations of the average loud speaker, the problem of full range tone reproduction would be simplified.

But with a listening public eager for variety . . . with pipe organs, symphony orchestras, and lyric sopranos, all crowding around the microphone, the reproducer has, indeed, an almost impossible job.

The new T.C.A. Dynamics show astonishing fidelity on both high and low extremes of studio broadcasting, together with the same extraordinary freedom from noise and hum that made the 1929 model so outstanding.

Comparative tests have been unanimous in their unqualified endorsement.

No receiving set can have an output which is more full-toned and rich than the sets equipped with these new T.C.A. Dynamics.

Write or wire for information

The assistance of our Engineering Department is at the service of Radio Manufacturers.

**TRANSFORMER CORPORATION
OF AMERICA**
2301-2319 S. Keeler Ave., Chicago, Ill.



STANDARD QUALITY ALWAYS



HOW MANY

KNOW?

MOST RADIO owners do not know when to change tubes. They go for months, putting up with poor reception caused by poor tubes—waiting until a tube quits before they buy a new one.

Why not go over your list of customers and—using the age of their sets as a guide—suggest to them that their reception will be vastly improved if they replace their old tubes with Ken-Rads—the standard quality, licensed tubes.

There's plenty of money in the replacement tube business—lots of it. Radio owners won't call for new tubes until necessary—but they *will* respond to the dealer's recommendations and suggestions. Try it—recommend Ken-Rad Licensed Tubes.

THE KEN-RAD CORPORATION, Incorporated, OWENSBORO, KENTUCKY

Division of KEN-RAD TUBE & LAMP CORPORATION

KEN-RAD

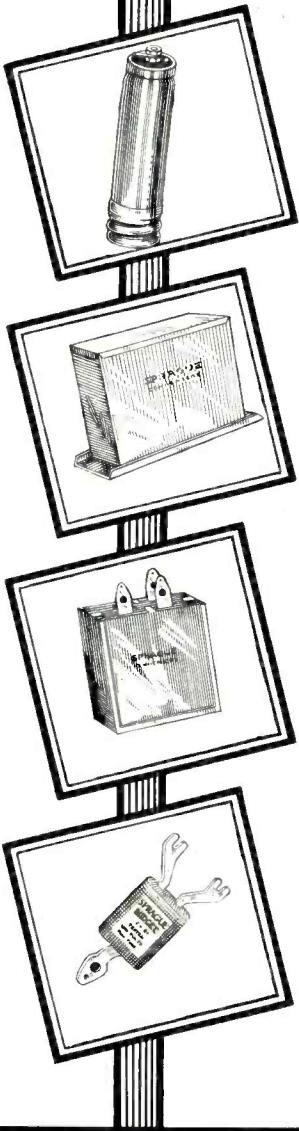
RADIO TUBES

Licensed by Radio Corporation of America



QUALITY

Sprague Precision Condensers are the Standard of Condenser Quality



WHEN critical engineers get together, they all agree that Sprague Condensers are superior . . . They know that Sprague Condensers have stood the severest tests of service — that they can be depended upon to perform their duties with unfailing faithfulness. Sprague Condensers are designed by the nation's foremost condenser engineers and assembled by skilled craftsmen . . . And here are a few reasons why Sprague Condensers are better:

THE SPRAGUE ELECTROLYTIC CONDENSER

A single unit allowing maximum flexibility for mounting in circuit. No welded or riveted joints in its one piece anode, made of purest aluminum. A lower leakage and better power factor than any other electrolytic unit, wet or dry. Rigid construction prevents possibility of internal shorts. Screw type socket makes for ease in mounting. Edge effect 10% of spiral type.

THE SPRAGUE BLOCK CONDENSER

Dielectrically superior due to patented paraffin layer process: Ruggedly protected by extra heavy sheet metal can. Impervious to moisture due to dipping of individual condensers, wrapping of assembled block in moisture-proof material, and triple sealing. Highest leakage resistance guaranteed above 5000 megohms per microfarad.

THE SPRAGUE ONE MICROFARAD UNIT

Flexible mounting — either unique stud or flange as desired. Correctly protected against moisture by double seal and only one small open end. Also furnished in midget assemblies using up to five sections of low capacity.

THE SPRAGUE MIDGET

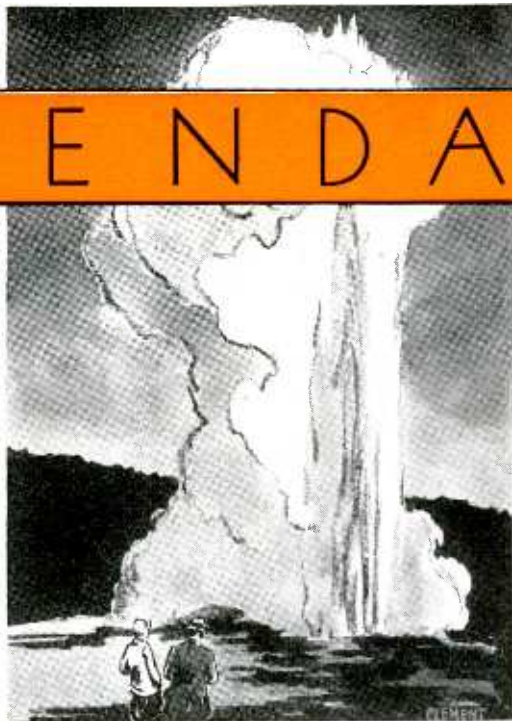
A compact and unusually strong unit. Tested to high voltage breakdown — waterproofed with asphalt covering and special process of triple impregnation. Easily and quickly mounted . . . Dual type of winding if desired.

SPRAGUE SPECIALTIES COMPANY
QUINCY, MASSACHUSETTS

SPRAGUE ELECTROLYTIC AND PAPER CONDENSERS
WILL SOLVE YOUR CONDENSER PROBLEMS



D E P E N D A B L E



"OLD FAITHFUL"—Yellowstone Park

Dependable—the dominant word in the radio industry today

Dependable—as to the sets themselves, but particularly as to the builders of those sets.

Before you tie up with any radio line, make doubly sure that it contains this great essential.



BECAUSE the Browning-Drake Corporation has steered clear of the pitfalls which made trouble for so many manufacturers, it has built for itself a solid foundation on which you can depend absolutely.

Its careful financing, its skilled management, its conservative production, assure you of merchandise that will perform satisfactorily, sell readily, satisfy customers, and will never be dumped onto the bargain counter.

Could you ask a better set-up for a profitable business connection?

Browning-Drake Corporation

226 Calvary Street

Waltham, Mass.

BROWNING-DRAKE SCREEN-GRID RADIO

over 1,500,000 people listen-in on Browning-Drake sets

ATWATER KENT RADIO

You've seen them come
you've seen them go —
but look at Atwater Kent!



Where is this one now?

Four years ago this make of radio was heralded as the success of the century . . . It is no longer manufactured.



. . . and this one?

Three years ago this make of radio was threatening to "clean up the market" . . . It is no longer manufactured.



. . . and this one?

Two years ago this make of radio was regarded as so exciting that many dealers took it on, "just to be on the safe side" . . . It is no longer manufactured.



. . . and this one

Last year there was quite a flurry over this make of radio . . . Today it is on the bargain counter—no longer manufactured.

AND ALL THE TIME—yes, for *eight years*—Atwater Kent Radio has steadily moved forward, in sales, in good-will, in resources, in stability as merchandise, in profits for merchants.

No overstocking. No dumping. No orphans in this line. **PROGRESS**—always **PROGRESS**, month after month, year after year. **PROGRESS** and **PROFITS** . . . Stabilize your business with Atwater Kent for 1930!



MODEL 1055—Radio of superb performance with a lowboy cabinet of distinction, adaptable to any room in any home. **\$109** less tubes

Prices slightly higher west of the Rockies and in Canada

ON THE AIR—Atwater Kent Radio Hour—Sunday Evenings, 9:15 (Eastern Time), WEA network of N. B. C. Atwater Kent Mid-Week Program—Thursday Evenings, 10:00 (Eastern Time), WJZ network of N. B. C.



YOU NEED SELF-EVIDENT QUALITY TO SATISFY YOUR CUSTOMERS

Today's critical buyers want the facts before they buy. Show them, with these simple tests, that Arcturus Blue Tubes give exceptional service in every radio set . . .

HERE are three tests that accurately measure the merit of any tube. You can easily make these tests, in a few minutes, in your own store. When you do, you definitely answer three questions about tubes that your customers are asking:



7 seconds by your customers' watch! That's how fast programs come in when Arcturus Tubes are used.

hum, no outside noise, to mar the smooth reception of any station.

"How long do they last?"

Show your customer, on the meter, that Arcturus Tubes withstand exceptional overloads. This kind of stamina has given Arcturus the world's record for long life.

These three Arcturus tests convincingly prove Arcturus' superiority. Thousands of Arcturus dealers and hundreds of thousands of Arcturus users know by actual comparison that Arcturus performance is unmatched by any other tube on the market today. If you have not checked Arcturus quality ask your jobber for a demonstration. See why Arcturus is now the fastest growing tube in the radio industry.



Exceptional ability to withstand overloads, easily proved on your meter, explains the long life of Arcturus Tubes.

"How quick do they act?"

Ask your customer to hold a watch on any set equipped with Arcturus Tubes. There's the program in 7 seconds.



Clear, pure tone, free from hum, is a certainty when sets are equipped with Arcturus Tubes.

"How clear is the tone?"

Let your customer listen to the clear, pure tone that is characteristic of Arcturus Blue Tubes. There's no annoying



ARCTURUS RADIO TUBE COMPANY
NEWARK, N. J.

ARCTURUS

this means programs in 7 seconds Quick-Acting

RADIO TUBES

AN UNUSUAL OPPORTUNITY for ESTABLISHED DISTRIBUTORS



\$99.50
LESS TUBES

Model 666—A remarkably selective, sensitive 9 tube screen grid chassis incorporating 4 screen grid tubes and 245 power tubes in push-pull. Cabinet beautifully finished in two-toned walnut. Full Dynamic Speaker. Marvelous tone!



\$149.50
LESS TUBES

Model 666C—A splendid radio-phonograph combination containing a 9 tube screen grid chassis with 4 screen grid tubes, full Dynamic Speaker and United motor and Pick-up, standard on many leading electrical reproducing instruments. Beautiful cabinet finished in two-toned walnut. At a price at which you usually sell a radio alone!

TO maintain closer cooperation with our many Dealers, we have adopted the policy of selling *exclusively* through Jobbers. This opens a tremendous profit opportunity for established Distributors.

Sentinel is one of the oldest, *most experienced* manufacturers in the radio-musical field. Sentinel Radio holds an excellent reputation among Dealers and the public—for *quality radio* at a *sensible price*. The new line of finely-built, full-toned screen grid models brings *new perfection* to radio at popular prices. Sentinel is priced on *value*—for *volume sales*—and Dealers have found it a most profitable line to feature! Saturday Evening Post advertising has told Sentinel's story to millions of prospective customers!

STRONG NEWSPAPER ADVERTISING

Each Distributor will be supported by a strong schedule of newspaper advertising, concentrated in his territory, to assure him of large volume. Each Dealer will be given a liberal allowance for cooperative advertising to draw customers to his store.

Distributors who are interested in building a *permanent profitable* business with an established line of radio—priced for *volume sales*—and protected by a policy that insures stability of *price* and *quality*—are urged to write us Today!

SENTINEL MANUFACTURING COMPANY

9705 Cottage Grove Avenue

Chicago, Illinois

SENTINEL



DON'T TAKE CHANCES

Buying or selling radio tubes of unknown quality endangers your profits ■ ■ Play safe—with TRIADS! Their quality has won for them the leadership in the radio tube world ■ ■ Today TRIAD engineers offer still further proof of this —newly improved TRIAD Tubes T-24 and T-27, now fully protected against burn-outs and rendered completely non-microphonic because of new design and construction! ■ ■ ■ ■

TRIAD MANUFACTURING CO., PAWTUCKET, R. I.



Now! TRIAD tubes are fully licensed under all R. C. A. General Electric and Westinghouse Electric Mfg. Co. Patents.

TRIAD RADIO TUBES

▽ TRIAD MANUFACTURING CO., INC., PAWTUCKET, R. I. ▽



**ASSOCIATED
FACTORY
DISTRIBUTORS**

At Albany
WM. J. KATTREIN
1031 Broadway

At Baltimore
W. B. MASLAND CO.
105 East Franklin Street

At Boston
TUNG-SOL SALES CO., INC.
221 Columbus Avenue

At Charlotte
S. L. BAGBY
219 W. First Street

At Chicago
THE EKKO COMPANY
400 West Madison Street

At Dallas
THE FOLSOM CO.
212 North Austin Street

At Detroit
TUNG-SOL SALES CO.
OF MICHIGAN
4612 Woodward Avenue

At Indianapolis
H. J. ARENS CO., INC.
202-4 S. Pennsylvania Street

At Minneapolis
A. A. HUME COMPANY,
104 N. Third Street

At New York
WIEDENBACH-BROWN CO., INC.
118 E. 25th Street

At Philadelphia
A. HOPKIN, JR. COMPANY
235 S. 8th Street

At Rochester
ERSKINE-HEALY, INC.
420 St. Paul Street

IT IS TIME FOR THE CONSERVATION OF CONVERSATION

BUSINESS has gotten over being scared of itself. The principal ailment from which it has been suffering is bellyache—from undigested merchandise—and beautiful oratory about the soundness of business does not relieve the patient.

There still are considerable overstocks among wholesalers and retailers of this industry. But speeches won't help those business men. Speeches don't move over-produced merchandise.

The financial strength of ASSOCIATED FACTORY DISTRIBUTORS made itself felt throughout the difficult past few months. Action, not speeches, were the credo. The products these twelve distributing organizations represent were not dumped on the market. Price guarantees were maintained. Straight-shooting jobbers and dealers found a friendship with a formidable fist.

Without banalities and loose talk—quietly and consistently—the vast field organization of ASSOCIATED FACTORY DISTRIBUTORS has been hard at work helping the wholesaler and retailer with business ideas and with local interpretation of worth-while manufacturers' business policies.

ASSOCIATED FACTORY DISTRIBUTORS

THE FLAME WON'T FLICKER

if there isn't any wind...



IN stocking radio tubes remember that if there are no faults in manufacture there will be no flaws in reception—that the flame won't flicker if there isn't any wind.

Hygrade Radio Tubes are made by an organization with twenty-nine years experience in the manufacture of electric lamp bulbs. This experience combined with rigid testing shuts out flaws in manufacture before they have a chance to creep in.

HYGRADE LAMP CO., Salem, Mass.

Makers of Hygrade Radio Tubes and Hygrade Electric Lamp Bulbs



One of the attractive display cards for dealer's use



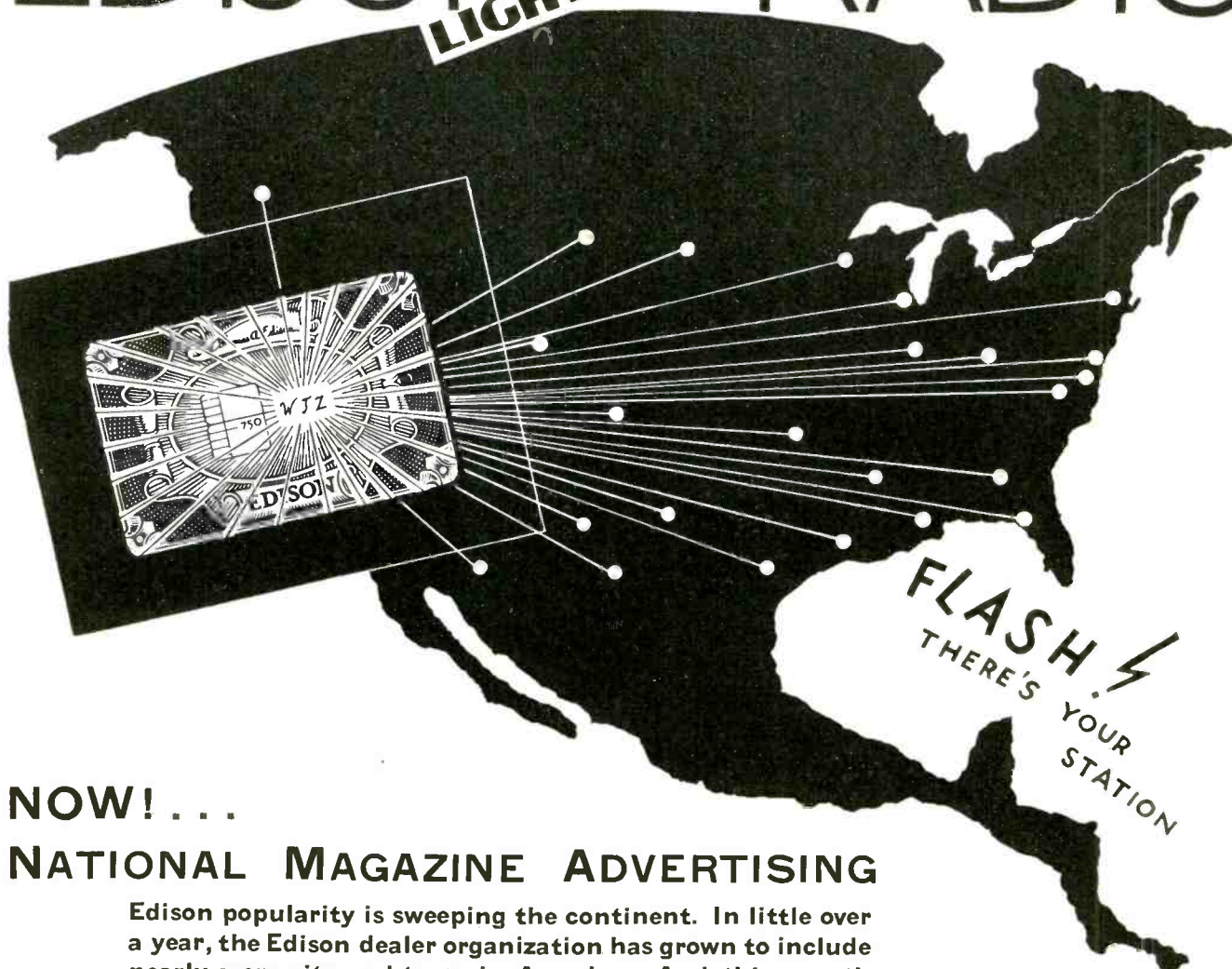
HYGRADE Radio Tubes

TUBES YOU CAN TRUST

HYGRADE Radio Tubes are licensed under the Radio Tube patents of Radio Corporation of America, General Electric Company and Westinghouse Electric and Manufacturing Company

EDISON RADIO

LIGHT-O-MATIC



NOW! . . .

NATIONAL MAGAZINE ADVERTISING

Edison popularity is sweeping the continent. In little over a year, the Edison dealer organization has grown to include nearly every city and town in America. And this month begins a great advertising campaign for Edison Radio in Saturday Evening Post—Collier's—Liberty. In millions of homes this advertising will create desire to possess this radio—great as the name it bears. That means more sales for Edison dealers—more profits—sure profits. For regardless of what the radio situation in general may be, with the Edison it's confidence and progress. Now, more than ever, the radio future is full of certainty and profit for dealers who share the strength of

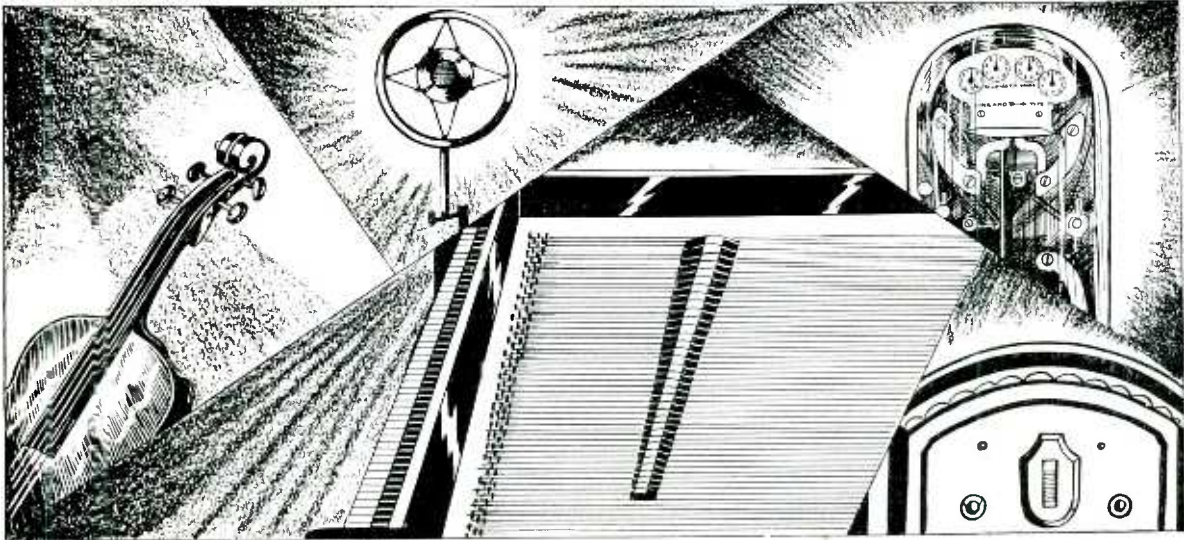
The first Edison magazine advertisement will feature Model C-4—superb radio-phonograph combination in massive studio cabinet. List price, \$325, less tubes. (Slightly higher in the far West.)



WRITE FOR DETAILED INFORMATION TO ANY OF THESE EDISON DISTRIBUTORS :

- EDISON DISTRIBUTING CORP. AT THE FOLLOWING ADDRESSES: ATLANTA, 199 Forsyth St., S. W. . . . BOSTON, Statler Bldg. . . . CHICAGO, 3130 So. Michigan Ave. . . . DALLAS, Santa Fe Bldg. . . . DENVER, 1636 Lawrence St. . . . KANSAS CITY, 2107 Grand Ave. . . . MINNEAPOLIS, 608 First Ave., N. . . . NEW ORLEANS, 128 Chartres St. . . . ORANGE, N. J. . . . PITTSBURGH, 909 Penn. Ave. . . . RICHMOND, 1204 East Main St. . . . SAN FRANCISCO, 1267 Mission St. . . . SEATTLE, Volker Bldg.
- * * *
- BINGHAMTON, Alliance Motor Corp. . . . BUFFALO, Alliance Motor Corp., 1460 Main St. . . . CINCINNATI, Edi-Radio Mart, 622 Broadway. . . . CLEVELAND, B. W. Smith, Inc., 2019 Euclid Ave. . . . DETROIT, E. A. Bowman, Inc., 5115 John R. St. . . . DUBUQUE, Renier Bros. . . . GRAND RAPIDS, Morley Brothers. . . . LOS ANGELES, H. R. Curtiss Co., 727 Venice Blvd. . . . MEMPHIS, Russell-Heckle Co. . . . NEW YORK, Blackman Distributing Co., 28 W. 23rd St. . . . OGDEN, Proudfit Sporting Goods Co., 2327 Grant Ave. . . . PHILADELPHIA, Girard Phonograph Co., Broad & Wallace Sts. . . . ROCHESTER, Alliance Motor Corp., 727 Main St., East. . . . SAGINAW, Morley Brothers. . . . ST. LOUIS, The Clentone Co., 2342 Olive St. . . . SYRACUSE, Alliance Motor Corp., 1045 South Salina St. . . . TAMPA, Tampa Radio Corp. . . . WATERBURY, Sprague Electrical Supply Co.

"...it opens new fields for electrical reproduction"



AUDAK'S marvelous achievement

The **TUNED PICK-UP**

hailed by the entire radio-music trade as
the epochal step forward expected of AUDAK

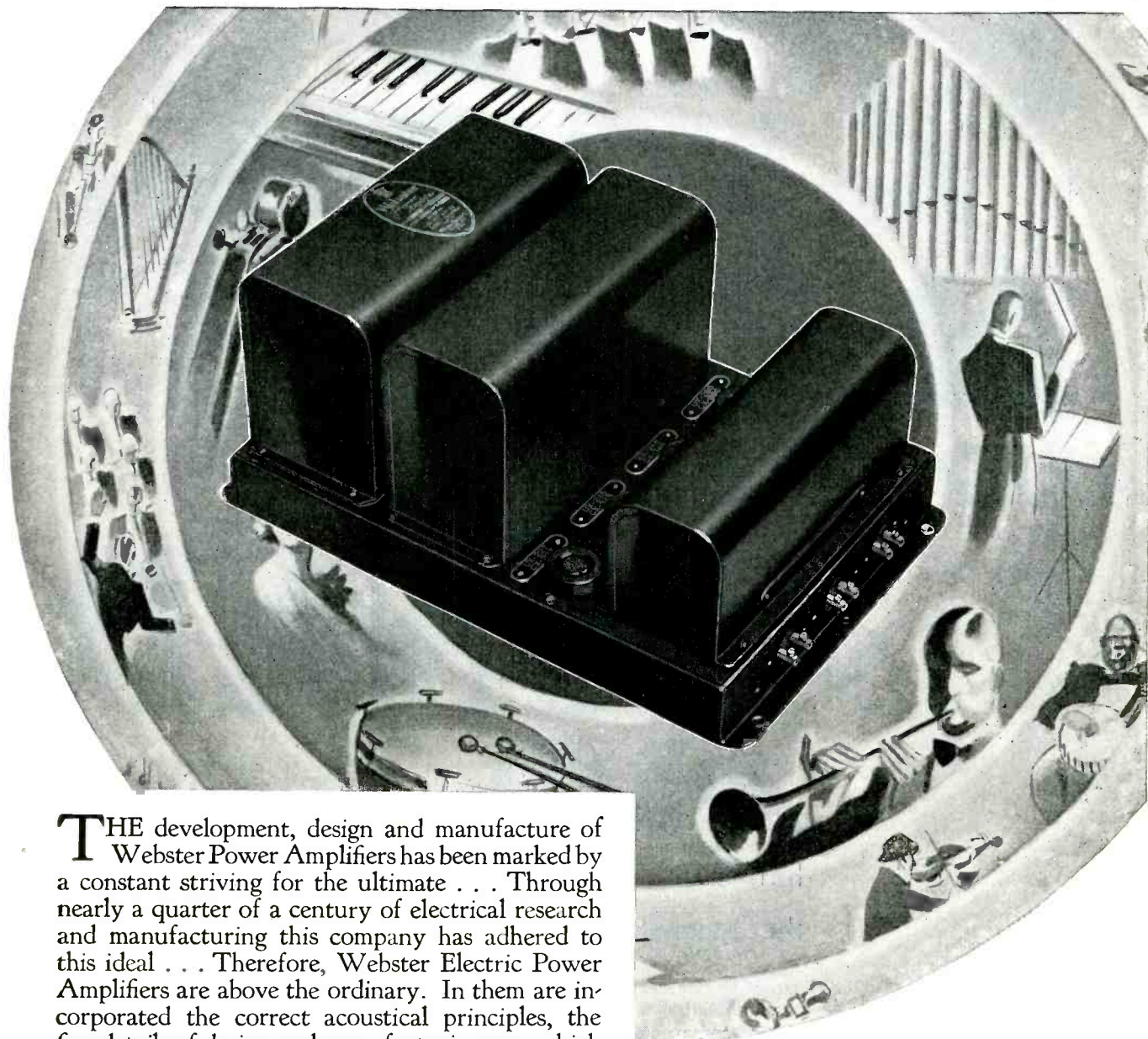
LOOK to a leader for leadership! Since the advent of the delicate, capricious instrument called a pick-up, foremost sound engineers have agreed that some stabilizer, some neutralizer of outside influences, was needed. The entire radio world looked to us for the solution of this grave problem that has affected theaters, broadcasting stations, dealers, and everyone else. If perfect reproduction could be secured at one time, why not ALL the time? How much better the "talkies" would be . . . and radio programs . . . and retail SELLING . . . if the leaders of the industry could only provide a TUNING principle that would standardize pick-up performance once for all! This is what was wanted. The TUNED PICK-UP was our answer.

NEW heights of acoustical excellence are now attainable by pick-up users. If you use the world-famous ELECTRO-CHROMATIC Pick-up—the standard by which others are judged and valued—you may be sure of the finest, most life-like speech and music at any and all times, regardless of the climate, or of human or other outside influences. When a violin string goes "off," never so slightly, its performance is "off" until it has been re-tuned. A super-sensitive pick-up, with intricate magnetic forces at work constantly, is like a violin . . . only more so. Remember, you can get absolute hundred-percent performance out of your pick-up, if you insist upon the The TUNED PICK-UP. Without it, you have but half the system, anyway.

The AUDAK COMPANY, 565 Fifth Avenue, New York

"Creators of High Grade Electrical and Acoustical Apparatus Since 1915"

NEW STANDARDS OF PERFECTION!



THE development, design and manufacture of Webster Power Amplifiers has been marked by a constant striving for the ultimate . . . Through nearly a quarter of a century of electrical research and manufacturing this company has adhered to this ideal . . . Therefore, Webster Electric Power Amplifiers are above the ordinary. In them are incorporated the correct acoustical principles, the fine details of design and manufacturing care which make for superior performance . . . To hear, to test, to compare the performance of Webster Electric Power Amplifiers with others is to come to the realization that here is superlative performance . . . Full details as to prices, discounts and samples will be furnished upon request.



The Webster Electric Pick-up is another Webster product which has made a unique name for itself by the brilliant character of its performance. It is available in two models. Almost every phonograph or radio jobber carries it in stock.

W E B S T E R E L E C T R I C C O M P A N Y
 Established 1909 R A C I N E , W I S C O N S I N

The Webster Electric line of power amplifiers is complete in every detail. There is a full range of models from the small size suitable for the home to the mammoth power models for use in the largest auditorium.

Webster Electric

Power Amplifiers



Announcing the new KYLECTRON Radio

The Series K-70

Outstanding New FEATURES

- 1 Kylectron Reproducer—improved, perfected—with tone unequalled. Non-directional reproduction. Absolute fidelity of tone over the entire musical scale.
- 2 Four screen grid tubes. Here is one of the few sets that employs screen grid power detection in addition to the customary screen grid power amplification stages.
- 3 Unique and strikingly beautiful cabinets. New type folding front discloses rich tapestry screen, held in place by gracefully designed grill. Genuine lacquer finish on all woodwork. Here's value that shows.
- 4 Auditorium volume—under perfect control. Accurate reproduction even with volume reduced to a whisper.
- 5 Reception—sensitivity and selectivity unexcelled. Three stages screen grid R. F. amplification and screen grid detector result in sharper tuning and unlimited range to meet modern broadcast conditions.
- 6 Ten tubes—four 224, one 227, one 280, one 201A, one line ballast tube and two 245 tubes in push pull.
- 7 Unexcelled value—model K-71 at \$149.50 and model K-72 (illustrated) at \$169.50 less tubes makes the series K-70 an outstanding value. (Prices slightly higher in West).



It takes more than just "selling points" to sell radios this year. Prospective radio buyers today are looking for something *new*—improved—radio that is definitely a step in advance. They wouldn't be prospects for radio

if they *weren't* thinking that way. Kylectron offers you the opportunity that *you* are looking for—because it is the kind of a radio that *your customers* are looking for. Read the seven features of the new Kylectron Radio and

compare them with any other radio on the market. Then, to get the *complete* story, write us for details of our selling plan—dealer franchise, discounts and cooperative helps.

UNITED REPRODUCERS CORP., SPRINGFIELD, OHIO

Kylectron Radio

RADIO'S GREATEST DEVELOPMENT

FOR

12

DEFINITE REASONS

YOU CAN MAKE BIGGER PROFITS Selling Majestic Exclusively

Experience proved to automobile dealers that profits were greater when they handled only one line. Soon radio dealers must face the same facts. Start now and be first on the road to bigger, surer profit. Majestic offers 12 sound reasons for concentrating all your efforts on Majestic.

Read Carefully — Think What Each of These Points Can Mean to You

- 1** Selling Majestic exclusively, you represent only one manufacturer—the best known in radio. Famous among dealers for fair policies and fair profits.
- 2** Majestic gives complete coverage of every fast-moving price class. If a prospect will buy any radio he will buy a Majestic. Six new beautiful models, two with new electric phonograph. All with the amazing Colotura Dynamic Speaker. \$95 to \$203.50 without tubes. Sold complete with Majestic tubes, from \$116.50 to \$225.
- 3** Majestic Matched Tubes, guaranteed for 1000 hours, shipped with every new Majestic. Servicing is reduced and customer satisfaction assured.
- 4** You are supported by the outstanding advertising campaign of the industry. Newspapers, magazines, broadcasting, billboards. Plus the endorsement of two million pleased customers.
- 5** Majestic Sales School provides expert training without tuition to help you and your salesmen sell more—earn more.
- 6** No dead models or orphans left on your hands. No forced sales of any kind.
- 7** Only one advertising campaign to tie up to.
- 8** Only one set of counter literature needed.
- 9** Only one window campaign to install.
- 10** Only one line to stock—with every model the fastest selling machine in its price class.
- 11** Only one distributor—working whole-heartedly with you for mutual profit.
- 12** ? ? ? ? ? An amazing new profit-leader to be announced soon to exclusive Majestic dealers.

Talk it over with your Majestic distributor. Learn what hundreds of exclusive Majestic dealers have already proved—that profits are greater when selling efforts are concentrated on Majestic. Get in touch with your Majestic distributor today.

GRIGSBY-GRUNOW COMPANY, CHICAGO, U. S. A.
World's Largest Manufacturers of Complete Radio Receivers

Majestic  *Radio*
MIGHTY MONARCH OF THE AIR



Samson Qualpensator

varies tone quality to
satisfy anyone anywhere

This unit makes it possible to please everyone with reproduction from radio set, phonograph, power amplifier, pick-up or talking motion picture equipment.

The Qualpensator is a quality compensator and volume control for attachment to any of the above equipment.

Some like the bass notes emphasized; others prefer them softened. Still others prefer the treble, both treble and bass notes, or even the

middle register notes modified to their taste.

The Qualpensator will vary tone quality to please in any one of these ranges. Simply turn a switch and adjust the knob for degree of change desired.

You can remove phonograph needle scratch, a heterodyne whistle or compensate for the partial deafness of your listener.

The Samson Qualpensator will do much to compensate for the poor acoustical properties of a room.

Hearing Is Believing

Dealers: Here is a great opportunity to sell a device on a money-back guarantee. Every prospect to whom we have demonstrated the Qualpensator has bought one or more. Send for operating instruction bulletin No. RRI.

And the price is right. Only \$25.00, and *immediate delivery.*

Main Office:
CANTON, MASS.

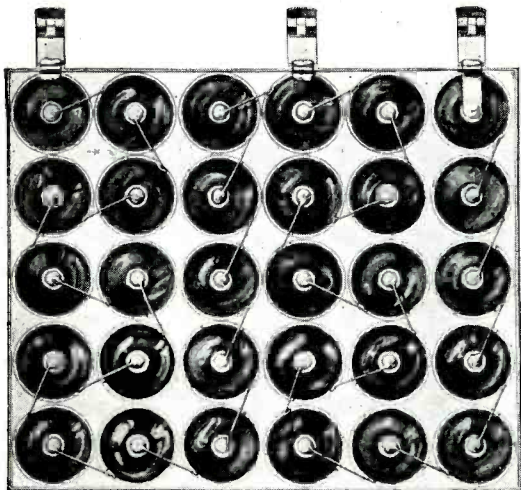
Samson Electric Co.
MEMBER
RMA

Factories: CANTON
and WATERTOWN, MASS.

NO "DRONES" AMONG
THESE "B's"—

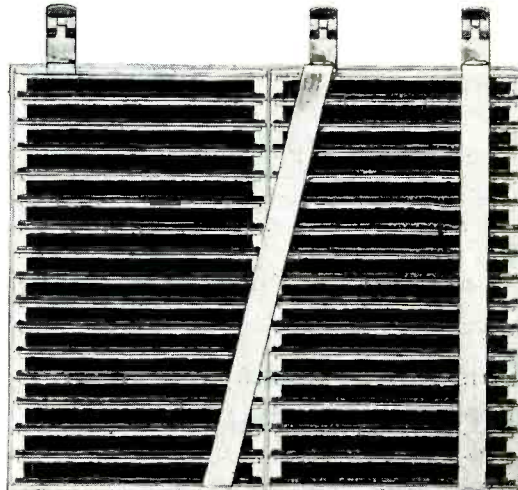
Eveready Layerbilt

"B" BATTERIES



CYLINDRICAL CELL CONSTRUCTION

This is a typical cylindrical cell "B" battery. Note the 29 fine wires and 60 solderings—89 chances for trouble. See also the large amount of waste space.



LAYERBILT CONSTRUCTION

Here is the exclusive Eveready Layerbilt construction. Only five solderings, and two broad connecting bands, all other connections being made automatically. Waste space eliminated. Layerbilt construction is a patented Eveready feature. Only Eveready makes Layerbilt Batteries.

EVEREADY LAYERBILT "B" Batteries are all workers. They'll keep you busy taking them off the shelves and handing them over the counter throughout the radio season.

Here's why: The Eveready Layerbilt trade-mark has been impressed upon the public consciousness as representing the best in "B" batteries. The two famous diagrams reproduced on this page are appearing in leading magazines and farm papers throughout the country, informing "B" battery users how waste has been eliminated in the patented Eveready Layerbilt, and how chances for trouble are avoided. And Eveready Layerbilt advertisements are backed up by a quality product! The public is proving that. Millions of satisfied users of Eveready Layerbilt "B" Batteries are coming back insisting on the Eveready Layerbilt label. Add to them the thousands of new consumers reached by Eveready Layerbilt advertising, and you know why Eveready Layerbilts are the best selling of all "B" batteries.

It will pay you to feature Eveready Layerbilts! Place orders now.

NATIONAL CARBON COMPANY, Inc. *General Offices:* New York, N. Y.

Branches: Chicago Kansas City New York San Francisco

Unit of Union Carbide  and Carbon Corporation

IN VITAL SERVICES—Eveready Batteries are being used in automatic train control, aircraft beacon receivers, talking motion pictures, short-wave transmission, television, for the protection of life and property, and to secure instant, unflinching, noiseless, perfect electrical power.



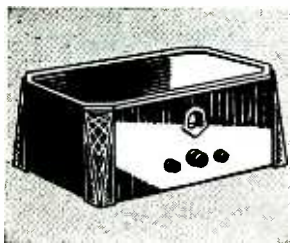
EVEREADY LAYERBILT "B" BATTERY No. 486, the original Layerbilt and the most economical of all Evereadys. List, \$4.25. There is also the Medium Size Eveready Layerbilt No. 485, listing at \$2.95.

EVEREADY Radio Batteries

Crosley gives them what they want in radio

... at lowest

possible prices!



\$56⁵⁰

(without accessories)

CROSLEY 31-S. This clever table model, with a rich burl walnut finish on a metal backing, incorporating the 7-tube Crosley Screen Grid Monotrad.

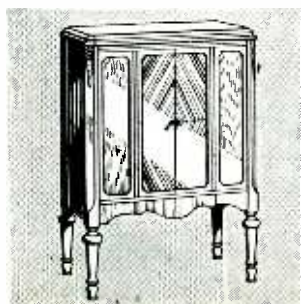
CROSLEY 41-S. similar to above—slightly larger. 8 tubes. (3 Screen Grid.) \$65.85 (without accessories).



\$112 (without tubes)

CROSLEY 33-S. This graceful Crosley 7-tube Screen Grid cabinet model with Dynacoil Speaker built in, is beautifully finished in two tones of satiny walnut veneer.

CROSLEY 34-S. This handsome cabinet model with double doors of diamond-matched panels, incorporating the 7-tube Crosley Screen Grid Monotrad and the Dynacoil Speaker. \$116 (without tubes).



CROSLEY 42-S. utilizing an 8-tube (3 Screen Grid) receiver in the same cabinet as Crosley 34-S, \$126 (without tubes).

CROSLEY 82-S. An artistic triumph in the modern trend is this stunning cabinet of two-tone walnut veneer, incorporating the Crosley 8-tube Screen Grid Unitrad and the Dynacoil Speaker. \$160 (without tubes).

Western prices slightly higher



RADIO buyers are all the same. They're looking for TONE and PERFORMANCE—and they'll pay for it if they have to. But when they find a rich clear tone and perfect performance in a set at about *half the price* they expected to pay . . . **THEY'RE SOLD!**

That's what they find in Crosley Radio! That's the reason Crosley sets are moving out of dealer's stores faster than ever! Value like this has never been equalled before in radio history.

Crosley gives them what they want. Screen Grid . . . remarkable selectivity and volume . . . triple range control . . . every modern feature. And a flawless tone developed according to the suggestions of such musical celebrities as Gershwin . . . Alma Gluck . . . Zimbalist, and others.

All of these features at prices that are almost unbelievable! No wonder they're all buying Crosley Radio!

Compare these Crosley sets with any radio you've ever seen! Get the rest of the Crosley story from your distributor. And then ask yourself—seriously—if you can afford to be passing up the chance to sell the hundreds of people right in your own town who read the Crosley story in the magazines and farm papers—and hear it on the air. Give this Crosley proposition the consideration it deserves.

THE CROSLEY RADIO CORPORATION
Powel Crosley, Jr., Pres.
CINCINNATI, OHIO
Home of WLW
"The Nation's Station"

You're there with a

CROSLEY



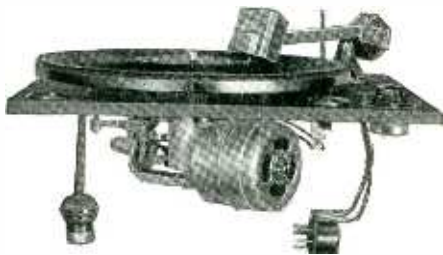
PACENT PRODUCTS

Mean Quality & Profit FOR MANUFACTURERS

IT'S going to be a record year for radio-phonograph combinations! Public interest will reach a new high level. Plan now to cash in on the tremendous interest in combinations — the ultimate in entertainment.

Just as in years past, Pacent is a step ahead in the field of phono-radio accessories. Pacent products bring to the manufacturer quality, simplicity, efficiency and economy in the design and merchandising of radio-phonograph combinations.

Pacent Phonograph Chassis



Supplied to the manufacturer completely mounted, with the Super Phonovox and the Pacent silent induction type motor. Also included are the automatic stop, volume control, radio-record switch and necessary extension cords. Quotations supplied upon request.

DEALERS! There is a bigger demand than ever before for Pacent Products. Place a trial order with your jobber and see how fast they sell!

PACENT ELECTRIC CO. 91 SEVENTH AVE. NEW YORK, N. Y.

Pioneers in Radio and Electric Reproduction for Over 20 Years
 Manufacturing Licensee for Great Britain and Ireland: IGRANIC ELECTRIC CO. Ltd. Bedford, England

Licensee for Canada: WHITE RADIO LIMITED, Hamilton, Ont.

SUPER PHONOVOX

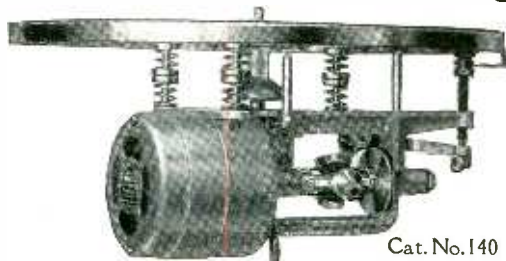


\$15.00
 (List Price)

Acknowledged leader in the pick-up field. English 36% Cobalt Magnets—no rubber bearings. Swivel head for easy needle changing. It meets every requirement.

Pacent engineering and research facilities are the largest in the history of the company. Manufacturers are invited to make full use of these facilities in the solution of special problems relating to radio-phonograph combination design.

Pacent Electric Phonograph Motor



Cat. No. 140
\$25.00
 (List Price)

Silent, induction type, specially designed for radio-phonograph use. Completely insulated against noise and vibration. Extremely economical in operation. All in all, the ultimate in electric motors for use in combinations.

Operates on 110 volts, 50 or 60 cycles A.C. Special voltages and frequencies available upon request.



NEW

FADA



AUTOMATIC STATION FINDER

40

Got the "blues"?—then remember business is still good for those who aggressively *sell* a quality product that is *profitable*. Read every word of the story of the New Fada 40, and place your sample order today!

The New Fada 40 has *nine* outstanding features:
 ★ Automatic station finder and indicator which flashes favorite stations in before your eyes at the turn of the dial, tuned to a hair with no more hunting for calibrations or kilocycles.
 ★ Highboy Gothic console cabinet with doors of diamond matched walnut, burl walnut panels, maple inlays and hand rubbed to an exquisite piano finish. ★ Revolutionary new tone character control minimizes interference in



CLOSED VIEW



OPEN VIEW

shock areas and permits adjustment of tone to individual preference. ★ Three screen grid tubes in a radically improved tuned impedance circuit. ★ Full power dynamic speaker with high efficiency response over the entire broadcast scale. ★ Vibra control, that achievement of Fada engineers that eliminates distortion and reproduces programs with astounding realism. ★ Static shield to improve selectivity in areas affected by local broadcast stations. ★ The entire set, chassis, cabinet, and speaker is a perfect example of master craftsmanship. ★ Approved by the Underwriters Laboratories of the National Board of Fire Underwriters. ★ It is obvious that such a set as the Fada 40 must be built by precision methods of hand made manufacture—yet considering the value both to you as a dealer for easy, profitable selling and to the user in the performance value and beautiful cabinetry, the price is surprisingly moderate—\$260.00 without tubes. The price is slightly higher West of the Rockies, in Canada and for Export.

F. A. D. ANDREA, INC., LONG ISLAND CITY, N. Y.

FADA
Radio

Tune in on the Graybar hour, 10 to 10:30, Eastern Standard Time, every Tuesday night . . . Columbia Broadcasting System.

PUT IT INTO STOCK OR STOCKING?

One guess: Would you rather put your profits into a wide variety of merchandise stock—or into the well-known stocking?



That question is easy to answer—for Graybar dealers, at least. Because, you see, the Graybar distributing house bears the big part of the stock-keeping burden for them.

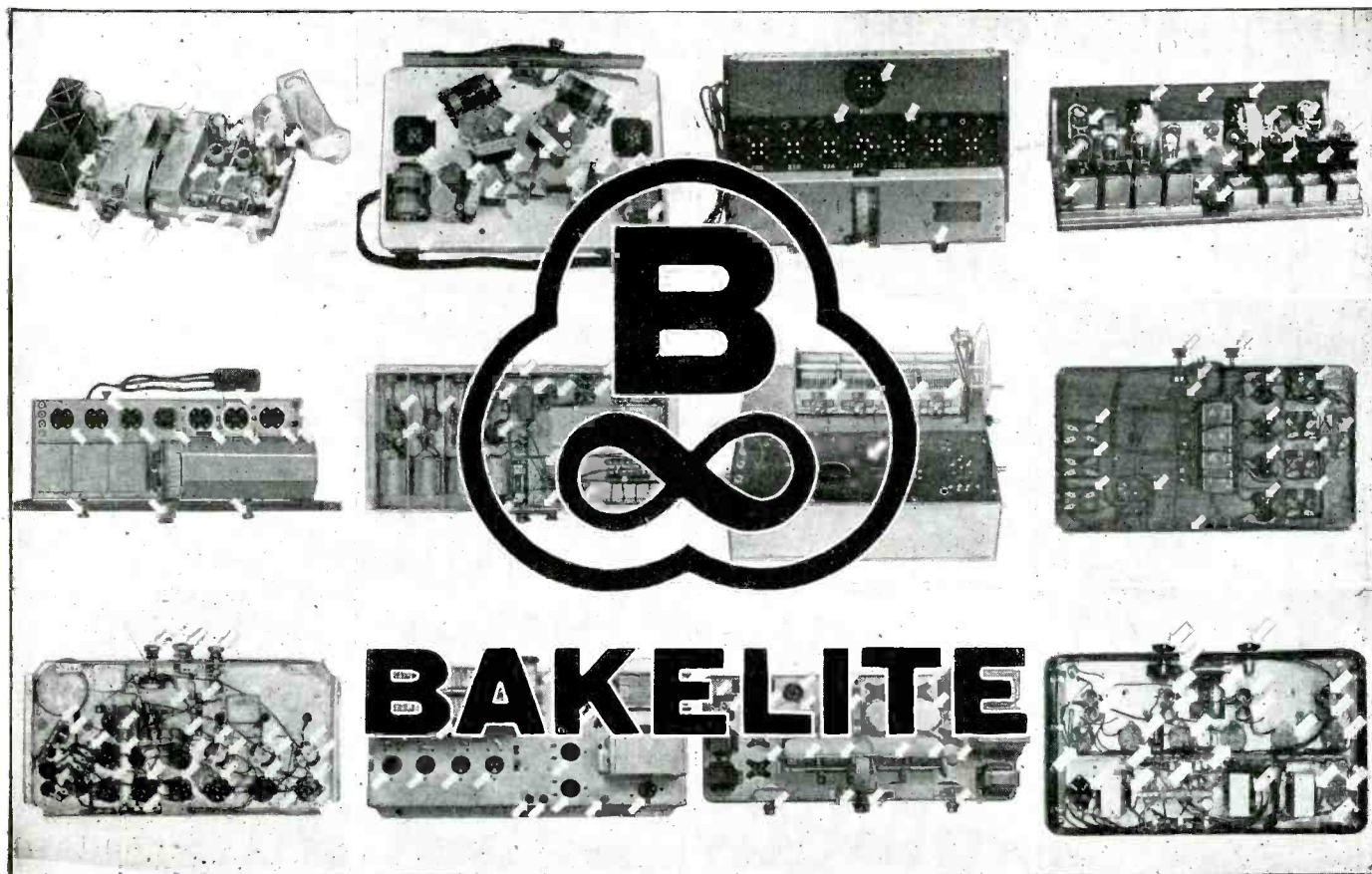


Because the Graybar, doing the stock-keeping job for many dealers, does it cheaper for each.



May we work out a stock maintenance plan for you?

GraybaR



Accepted as the synonym for superior insulation
by the whole radio industry

Year by year radio engineers and manufacturers have been striving for greater clarity, truer tones and finer selectivity in radio reception. Remarkable progress has been made in receiver and reproducer design. Theories, practices and materials generally accepted but a short time ago are now obsolete. There is one practice, however, that has stood the test from the day of one tube receivers

and head sets, to this day of screen grid tubes and dynamic speakers. It is the use of Bakelite Materials for insulation.

Radio dealers may be sure that the use of Bakelite Insulations in radio receivers is an important factor in assuring long continued customer satisfaction. Write for Booklet 39, "Bakelite in Radio."

BAKELITE CORPORATION

247 Park Ave., New York, N. Y. Chicago Office: 635 W. 22nd St.
BAKELITE CORPORATION OF CANADA, LTD., 163 Dufferin St., Toronto; Ont.

BAKELITE

REGISTERED

U. S. PAT. OFF.

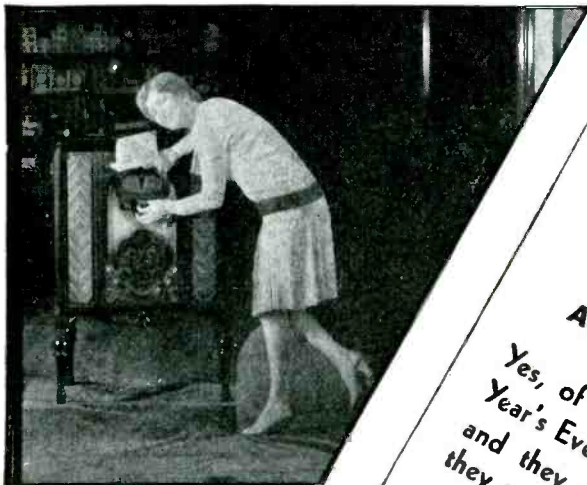


THE MATERIAL OF A THOUSAND USES

"The registered Trade Mark and Symbol shown above may be used only on products made from materials manufactured by Bakelite Corporation. Under the capital "B" is the numerical sign for infinity, or unlimited quantity. It symbolizes the infinite number of present and future uses of Bakelite Corporation's products."

SILVER Policy for the "Hard Going"

SILVER RADIO advertising policy for days like these is the policy of getting squarely behind dealers who get behind SILVER RADIO. Your distributor has the details.



And with Sally Silver to lure the town into your store, and with

«OH, DADDY»

Use the radio to dance to? At my party?

Yes, of course I know the Calverts did, New Year's Eve, but daddy—they've got a SILVER and they get gorgeous music from anywhere they want—and ours!—Oh, daddy!

And that—if you must know—is just why we sell and recommend

— and with your window radiating the finest QUALITY



SILVER RADIO EXTRAORDINARY

A few dollars more cost, yes—but a world of added joy in the Mastery of the Air! And all because it's made right—by America's First Maker of Screen-Grid Radios. Six beautiful models—covering the whole price range of fine radios—from \$145 to \$195. The Model 75B (Illustrated) is priced at \$158, less only tubes.

Your Name Here



—you can well afford to let the dumping trucks go by while you build the lasting reputation that is the birthright of the SILVER dealer.

SILVER-MARSHALL, Inc.

6421 West 65th Street, Chicago, U. S. A.

Call your SILVER distributor now, or write— or wire—us for his name if you've forgotten it.



SILVER

-MARSHALL



RADIO

EXTRAORDINARY

Get!

THE NATIONAL RADIO DEALERS RED BOOK OF TRADE-IN VALUES

Giving the list prices, description and present 1930 trade-in values of all the nationally known makes of radio since the beginning. If you have ever allowed more for an old set than it was worth—if you have ever lost a sale because you couldn't show the customer in print what his old set was actually worth—if you have ever wanted a standard national list of trade-in values that you could give each of your salesmen—get the National Radio Dealer's Red Book of Trade-in Values.

FREE

We will send a copy of this valuable book, just published, **FREE OF CHARGE**, to every new two-year subscriber to *Radio Record*, at the regular subscription rate of \$3.50 for the two years.

**WITH THIS BOOK YOU CAN MAKE FROM \$5.00 TO \$25.00
MORE ON EVERY SET YOU HAVE TO TAKE IN TRADE**

Show the Customer What His Old Set is Worth and Pay Him No More!

The Red Book should be in your hands before you trade in another set. Subscribe also for each one of your salesmen. If you are already a subscriber your order will be considered as a renewal from your present expiration date.

**THIS ORDER BLANK MEANS PROFITS
FILL OUT AND MAIL AT ONCE!**

*Keep Your
Profits on
New Sets for
Yourself*

RADIO RECORD PUBLISHING CO.,
301 Tribune Annex,
Minneapolis, Minn.

We would like to make money on our trade-ins and we would also like to use those business-building ideas in the *Radio Record*.

We are enclosing \$3.50 to cover one subscription to the *Radio Record* for two years at \$3.50, beginning with your next issue. You are to immediately mail one copy of the National Radio Dealer's Red Book of Trade-in Values to us, postpaid.

Date

Name of Firm
(print in full)

Street and Number

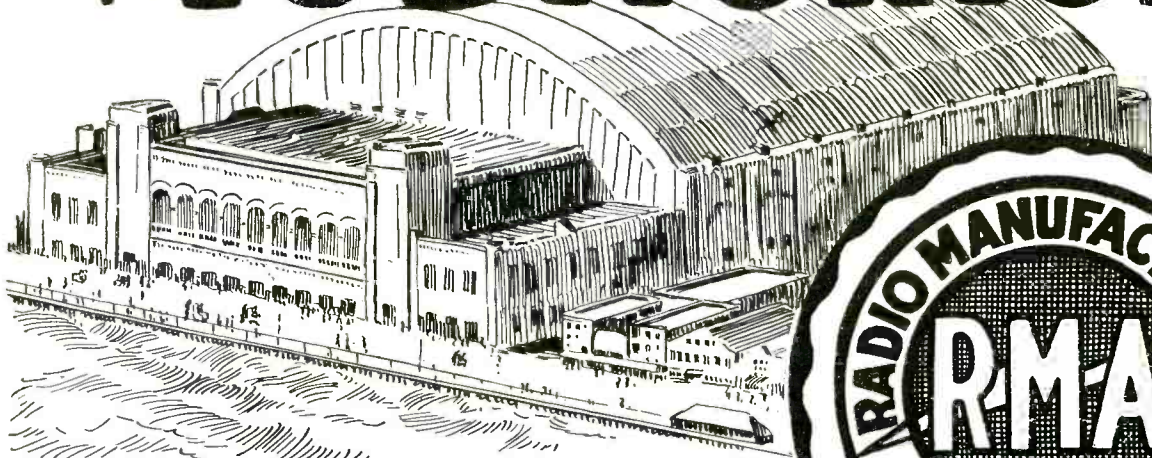
City State

Kind of Business

4th RMA Trade Show

ATLANTIC CITY

AUDITORIUM



JUNE 2 to 6th

All indications are that the 4th Annual R. M. A. Trade Show to be held in Atlantic City June 2nd to 6th will be the largest as well as the most important Trade Show in the industry's history.

In addition to the latest receiving set models and accessories, which will be exhibited and demonstrated in the Atlantic City Auditorium, many important subjects of interest to everyone in the industry, from dealer to manufacturer, will be discussed.

During the same week as the Trade Show, the Sixth Annual R. M. A. Convention, the National Federation of Radio Associations, the Radio Wholesalers Association, and the Institute of Radio Engineers will convene in Atlantic City.

Atlantic City abounds in first class hotels. The visitors to the trade show can be assured that an average of \$10.00 per day will well cover all expenses except transportation. For your information, we give the round trip railroad rates to Atlantic City from the principal cities.

The Radio Trade Show immediately follows the opening on Decoration Day of Atlantic City as the "Playground of the World." All of the attractions of Atlantic City, piers, golf courses, bathing, fishing, etc., will be in full swing, affording you an ideal opportunity to combine business with pleasure.

Make your hotel reservations through the Atlantic City Convention Bureau, Atlantic City, N. J. Invitation credentials for the Trade Show will be mailed to the trade about May 1st.

RADIO MANUFACTURERS' ASSOCIATION TRADE SHOW
 Room 1904, TIMES BLDG., NEW YORK.

Under Direction of U. J. HERMANN and G. CLAYTON IRWIN, Jr.

**ROUND TRIP
 Railroad Rates To
 Atlantic City**

All railroads are offering special fare and one-half rates for the round trip to Atlantic City. Following are the round trip rates from the cities indicated.

Pittsburgh	\$ 22.50
Cleveland	29.00
Toledo	34.83
Detroit	37.94
Columbus	32.28
Dayton	36.09
Cincinnati	38.75
Louisville	45.21
Indianapolis	42.03
Chicago	47.28
Milwaukee	51.87
St. Louis	55.32
Kansas City	70.38
Minneapolis	69.27
Omaha	74.18
Denver	103.20
Los Angeles	162.89
San Francisco	162.89
Portland & Seattle	163.10

UNRIVALLED

in Quality, Value, Salability

..and the only LOOP set on the market



SO far ahead has Zenith gone in the perfection of the loop-operated receiver... requiring neither aerial nor ground... that other manufacturers have ceased entirely to compete. Super Zenith Model 64, with its exquisite high-boy cabinet, stands alone today, not only as a matchless "buy" for the consumer, but as a great profit-maker for the dealer. Are YOU cashing in on it?

ZENITH RADIO CORPORATION, CHICAGO, ILL.

\$370

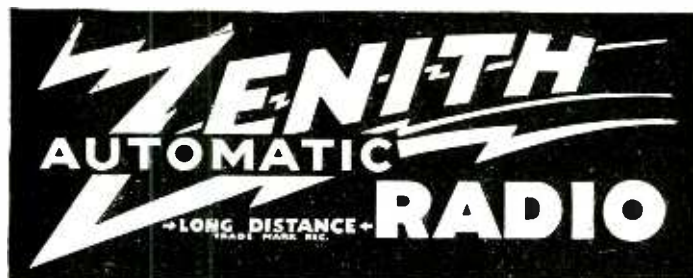
LESS TUBES

Super Zenith MODEL 64. Nine tubes, including rectifier. New Screen-Grid circuit. Double Push-Pull. Genuine Automatic Tuning. Super-size Syntonic Dynamic type speaker. Loop-operated. Handsome high-boy console of Butt and solid Walnut.

Western Prices Slightly Higher

NEW SUPER ZENITH

MODEL 64



"Automatic Radio" Owned and Controlled by The Zenith Radio Corp., Chicago, U. S. A., under the following patents—Vasselli 1581145, Re-issue 17002, Heath 1638734, Marvin 1704754, Canada 264391, Great Britain 257138, France 607436, Belgium 331166. Also under other U. S. and foreign patents pending. Licensed only for Radio amateur, experimental and broadcast reception. Western United States prices slightly higher.

This advertisement



Stop him!
—he's ruining your A.C. tubes

HIGH voltage shortens the life of tubes and set. These higher line voltages are prevalent everywhere. You will save tubes—make them last their full life—with Wirt Voltage Regulator. It cuts down line voltages to a safe maximum, tends to quiet line noises, improves local and DX reception. Fully guaranteed; money back if not satisfied. Hundreds of thousands already in use.

Good dealers have Wirt Voltage Regulators—or we ship direct prepaid. Two sizes—211-B (\$3.25) for sets with dynamic speaker and sets with seven or more tubes; 211 (\$2.25) for sets with less than seven tubes and sets without dynamic speaker. See your radio dealer now.



WIRT COMPANY
5221 Greene St. Philadelphia, Pa.

Reprinted from Collier's, March 15

This advertisement tells 2,250,000 people that they will save tube and improve reception by utilizing the

WIRT VOLTAGE REGULATOR

Naturally you won't get the benefit of our advertising—and the Regulator is advertised the year round—unless you display the goods on your counter.

The Wirt Voltage Regulator is a variable control—instantly adjustable. Anyone can install it. It does save tubes, it does eliminate many line noises, it does improve local and DX reception. Fully guaranteed; money back to any set-owner who doesn't find it satisfactory.

Hundreds of thousands of Wirt Regulators now in use. You will eliminate a great many service calls if you provide a Wirt Regulator for every A. C. set you sell.

Two sizes—211-B (\$3.25 list) for sets with dynamic speaker and sets with seven or more tubes; 211 (\$2.25 list) for sets with less than seven tubes, and sets without dynamic speaker.

WIRT COMPANY
5221 Greene Street Philadelphia, Pa.

Putting Your Business to the Front



Newest in electrics
—Raised Glass Letters combined with brilliant Neon Tube for day- and -night attractiveness.

No matter where your business place . . . side or main street . . . town or city . . . you can have the power of moving light—the brilliancy and beauty of a new Flexlume electric to attract new patronage.

Sales talk? No! . . . the actual experience of Flexlume users . . . tens of thousands who have substantially increased sales with Flexlume day-and-night signs. Your business too can expect and receive more from Flexlumes.

Some are made with colored Neon tube lights; others with clear-cut Raised Glass letters illuminated from within; then there are flashing, spectacular bulb lamps—or combinations of these lights,—giving you new values in sign display.

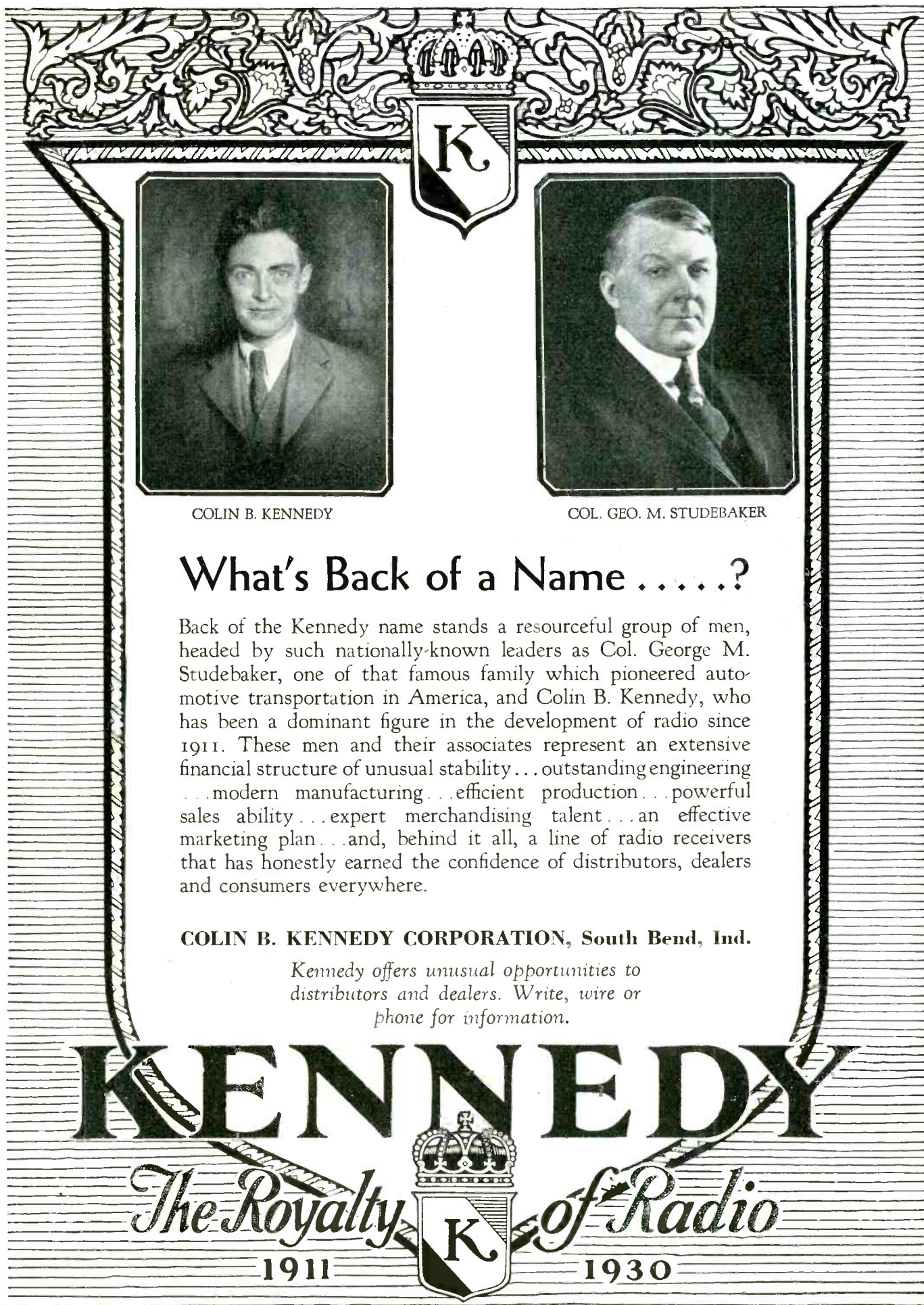
And remember Flexlume have behind them the force of the largest specialized electric sign plants in the world . . . million-dollar financial responsibility . . . service experts, men trained in electrical advertising ideas . . . an interest more in your continuous use of an electric sign than in its mere purchase.

Without obligation, let us submit a color sketch of an electric sign that will exactly meet your requirements. Write FLEXLUME CORPORATION, 3085 Military Road, Buffalo, N. Y.



NEON TUBE . . .
RAISED GLASS
LETTER . . . EXPOSED
LAMP or COMBINATIONS

SALES AND
SERVICE OFFICES
IN CHIEF CITIES OF
U. S. AND CANADA



COLIN B. KENNEDY

COL. GEO. M. STUDEBAKER

What's Back of a Name?

Back of the Kennedy name stands a resourceful group of men, headed by such nationally-known leaders as Col. George M. Studebaker, one of that famous family which pioneered automotive transportation in America, and Colin B. Kennedy, who has been a dominant figure in the development of radio since 1911. These men and their associates represent an extensive financial structure of unusual stability . . . outstanding engineering . . . modern manufacturing . . . efficient production . . . powerful sales ability . . . expert merchandising talent . . . an effective marketing plan . . . and, behind it all, a line of radio receivers that has honestly earned the confidence of distributors, dealers and consumers everywhere.

COLIN B. KENNEDY CORPORATION, South Bend, Ind.

Kennedy offers unusual opportunities to distributors and dealers. Write, wire or phone for information.

KENNEDY

The Royalty of Radio

1911

1930



The **New**
Readrite
Model 245

Tests
Screen
Grid

\$12
NET

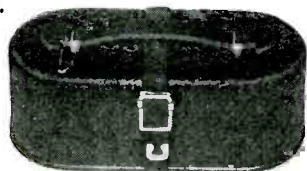
Set Analyzer and Tube Tester

Tests accurately — filament, plate, grid, screen-grid, cathode and line volts. Shows plate current and grid change.

A complete tester for the latest sets using 245 power tubes. Compact. Simple to use. Easy to carry.

Self-contained. The seamless steel cover with leather handle holds in place the cable, cords and plug. Beautiful baked enamel finish. An outstanding value.

At your jobbers. If ordered direct remittance must accompany order.



READRITE METER WORKS

Established 1904
6 College Ave., Bluffton, Ohio

**NO
NOTE
CAN
ESCAPE**

THORDARSON Power Amplification

Realistic reproduction for all occasions . . . and in every circumstance . . . that's what Thordarson's new line of complete Audio Amplifiers means to the listening world. And nothing short of actuality in sound reproduction will be accepted today.

Thordarson Amplification
Equipment Means
Consistent Audio Excellence

The engineering laboratories of Thordarson . . . with years of research and experience behind them . . . have succeeded in solving the problems of sound reproduction. And with the utmost in manufacturing facilities, the most exacting specifications are faithfully and efficiently fulfilled.

Why not make use of Thordarson engineering service in your work? We can give you installation suggestions that will make your work easier and more profitable.

THORDARSON

Transformer Specialists Since 1895

THORDARSON ELECTRIC MANUFACTURING CO.

Huron, Kingsbury and Larrabee Streets
Chicago, Illinois, U. S. A.

ADVANCE ANNOUNCEMENT

On Monday, June 2nd, the Fourth Annual Trade Show Number of *Radio Retailing* will be in the hands of those attending the Radio Show and Convention at Atlantic City.

But 27,000 will read that issue . . . active dealers, jobbers, distributors, and manufacturers . . . whether they attend the Show and Convention or not.

All over the country, this big, important annual issue will take the news of new models, new accessories, new parts, new prices, policies, practices . . . new trade names in the making, new strength for old trade names.

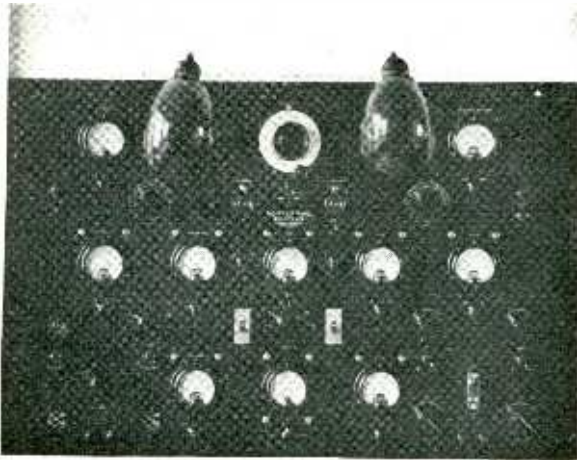
Your advertisement in this issue will receive unusual attention.

4th ANNUAL TRADE SHOW NUMBER *of Radio Retailing*

(ADVERTISING FORMS CLOSE MAY 15TH!)

NEW TESTING EQUIPMENT

For Complete Receiver Service Work
and in the Laboratory



Size: 24 in.x38 in. Weston Equipped

PANEL TX-600

Every possible Receiver and Tube* test is made instantly on this new Tester with direct readings.

The time loss and bother in assembly of meters and various parts for different operations, as with small portable equipment, is all eliminated by the TX-600 Panel.

It is the fastest complete Tester made, and is in fact the only instrument of its kind on the market.

No progressive Service Organization can really afford to be without this up-to-date equipment and its big time-saving factor.

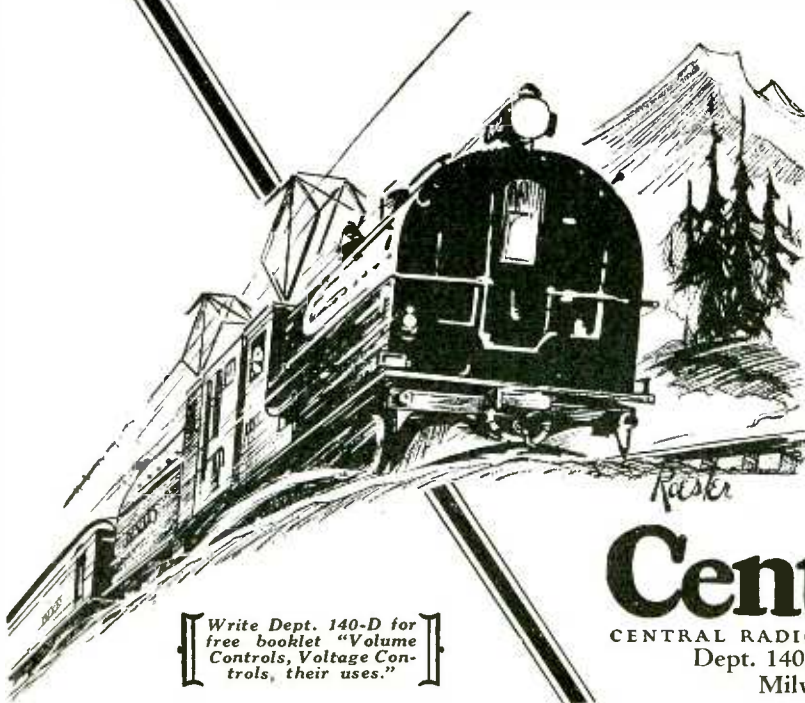
*Including Pentodes.

Quick — Accurate — Direct Reading — Complete — All Electric
DESCRIPTIVE LITERATURE ON REQUEST.

NORDEN-HAUCK, Inc., Engineers

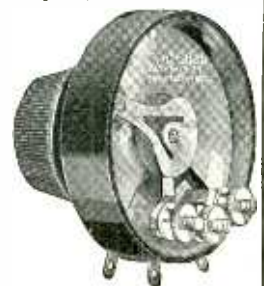
Delaware Avenue & South Street
Philadelphia, Pa., U. S. A.

a SMOOTH start and a STEADY pull



THE giant electric locomotive starts with velvet smoothness and pulls the heaviest loads over steep mountain grades with steady, unflinching power. It's all a matter of proper control.

The increased sensitivity of your radio demands the S-m-o-o-t-h control that only Centralab can give. Noiseless, free of inherent sputtering—self-inflicted static. For smooth, quiet, velvety radio reception your radio must be **CENTRALAB** equipped.



Centralab
CENTRAL RADIO LABORATORIES
Dept. 140-D 20 Keefe Ave.
Milwaukee, Wis.

Write Dept. 140-D for
free booklet "Volume
Controls, Voltage Con-
trols, their uses."

WORLD WIDE RECEPTION

WITH THE NEW
NORDEN-HAUCK

SHORT WAVE

SUPER DX-5



Size: 9x19x10 inches

Weight: 30 lbs.

- ENTIRELY NEW
- ADVANCED DESIGN
- NEW PENTODE TUBE
- SENSATIONAL DISTANCE
- 14-190 METERS RANGE
- RELIABLE PERFORMANCE
- AC AND DC MODELS

Adaptable for Long Waves



*Write, Telephone or Telegraph Today for
Complete Information*



NORDEN-HAUCK, Inc.

ENGINEERS

N. W. Corner Delaware Ave. and South St.
PHILADELPHIA, PA., U. S. A.



Carton of four Eveready Raytheon B-H Tubes

FOR THOSE
CUSTOMERS WHO USE
"B" ELIMINATORS...

A NEW EVEREADY RAYTHEON B-H TUBE

MEANS BETTER RECEPTION

MILLIONS of "B" eliminator units are especially designed for the original gaseous rectifying tube . . . the famous B-H. Tell those customers who use such units what a great difference a new Eveready Raytheon B-H Tube will make.

You can buy Eveready Raytheon B-H Tubes in handy cartons of four tubes each. Always keep at least one full carton on your counter.

NATIONAL CARBON COMPANY, INC.
General Offices: New York, N. Y.

Branches: Chicago Kansas City
New York San Francisco

Unit of Union Carbide  and Carbon Corporation



(Trade-marks)

CORWICO VULCAN LIGHTNING ARRESTER

It's A Static Ejector and Lightning Protector

\$1
LIST



In addition to assuring protection against lightning, the Corwico Vulcan Lightning Arrester also dissipates accumulated static charges, thus improving reception. The Vulcan Arrester is

packed in an attractive two-color box and its performance is guaranteed by a \$100 pledge to repair lightning damage to any set equipped with this arrester.

If your Jobber cannot supply you with Corwico Vulcan Lightning Arresters, order a sample carton of 6 direct.

CORNISH WIRE COMPANY, INC.
28 CHURCH ST., NEW YORK CITY
Makers of the Famous

BRAIDITE HOOK-UP WIRE

**DEPENDABLE
SERVICE MEN
depend upon
DURHAM
RESISTORS**

SERVICE MEN use more Durham Resistances for replacement work than any other make. If you are not using Durham units now, write for literature and learn how Durhams will eliminate costly "second calls" and lost customers for you.



DURHAM
METALLIZED
RESISTORS and POWEROHMS
INTERNATIONAL RESISTANCE COMPANY, 3000 Chestnut St. Philadelphia, Pa.

How to hook up, test, adjust and repair modern radio sets



JUST OUT!
New Second Edition
**REVISED
AND
ENLARGED**

Now an up-to-date manual for the dealer, serviceman and set builder.

Practical Radio Construction and Repairing

By JAMES A. MOYER and JOHN F. WOSTREL

Faculty, University Extension, Massachusetts Department of Education
353 pages, 5½ x 8, illustrated, \$2.50

THE new edition of this practical work, just off the press, brings the material right up to date. It covers the radical changes that have taken place in receiving set construction during the past few years.

The book strikes a universal appeal among dealers, servicemen and those who build and repair their own sets.

It gives efficient and tested methods for locating trouble quickly and making workmanlike repairs. Operation details of various typical sets are given. The new edition covers the function of speakers (including the new dynamic type), chargers, battery eliminators, socket-operated receivers, etc. The recently aroused interest in short-wave reception is reflected in a section which deals with the construction of a receiver adapted to this particular wave band.

Chapter Headings

1. Radio Essentials.
2. The Antenna and Ground System.
3. Tool Equipment for Radio Construction.
4. Instruments and Methods for Radio Testing and Repairing.
5. Sources of Electricity for Vacuum Tubes.
6. Radio-frequency Amplifiers.
7. Audio-frequency Amplifiers.
8. Construction of Receiving Sets.
9. Resistance Coupling for Audio-frequency Amplifiers.
10. Impedance Coupling for Audio-frequency Amplifiers.
11. Construction of Impedance-Coupled Receiving Set.
12. Construction of "Universal" Four-Tube Set.
13. Construction of Reflex and Tuned Radio-frequency Sets.
14. Construction of Super-heterodyne Receiving Sets.
15. Short-Wave Receiver.
16. Construction of Loud Speakers.
17. Eliminators and Chargers for "A", "B" and "C" Batteries.
18. Testing and Repairing Radio Receiving Sets—Trouble Shooting.

See this book FREE—Simply mail the coupon

MC GRAW-HILL FREE EXAMINATION COUPON

McGraw-Hill Book Co. Inc., 370 Seventh Ave., New York, N. Y.

Please send me for 10 days' free examination a copy of Moyer and Wostrel's PRACTICAL RADIO CONSTRUCTION AND REPAIRING, New Second Edition, \$2.50 postpaid. I agree to remit for the book or return it within 10 days.

Signed

Address

City and State

Official Position

Name of Company

(Books sent on approval to retail purchasers in the U. S. and Canada only.)

R.R. 3-30



THEY ALL LIKE IT!

Radio engineers, production managers, sales managers^s, and purchasing agents all like Corwico Super Braidite Hookup Wire because of its increased voltage breakdown, its ease in handling, its neat appearing, glossy, flame-proof insulation, and its moderate cost.

Corwico Super-Braidite is made with solid or stranded core in 15 different color combinations.

With Corwico Super-Braidite we furnish our Model "A" Stripping Machines for use in your plant. Write for a sample of Super-Braidite and full particulars.

*More Than a Wire—
A Hook-up Service*

CORNISH WIRE COMPANY, INC.

28 Church St., New York City

Quick Profits from A New Market—



**[WRITE TODAY
TO DEPT. R]**

The Kato Konverter changes 32 volt D. C. current to power for A.C. all-electric Radios. Now the great farm market is open and eager to buy equipment that brings the best in radio service and entertainment. The Kato Konverter is reasonable in first cost, thoroughly dependable and economical in operation; is guaranteed for one year. Thousands are in use. Thousands more will be sold in 1930. Get your share of profits. Also (220 volt D.C., 110 volt D.C.) to 110 volt A. C.

**[Kato "A" & "B" Battery
Eliminators to operate from
32 volt light plants will also
extend your field for profits.]**

KATO ENGINEERING CO.
Mankato, Minnesota



*A vital factor
in quick heating tubes—*

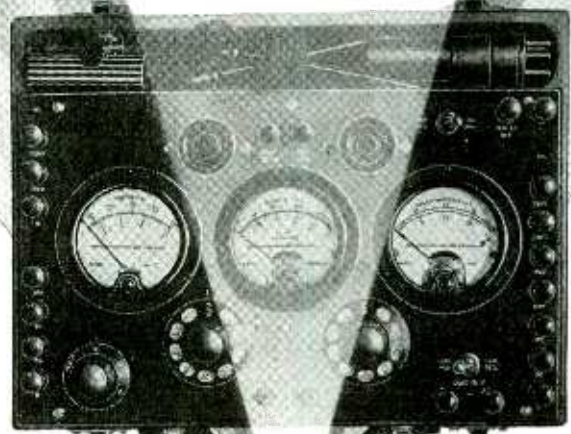
**SUMMERILL SEAMLESS
NICKEL TUBING**

Radio tube manufacturers can use Summerill Seamless Nickel Tubing in the manufacture of quick heating tubes with the assurance that it is the best obtainable and is backed by an experience extending over thirty years.

THE SUMMERILL TUBING CO.
Founded in 1899
BRIDGEPORT, PA. (Philadelphia District)

FREE Data Sheet Service for All Makes of Receivers furnished with the Weston Model 547 Radio Set Tester

With every Weston Radio Set Tester there is furnished a loose-leaf instruction book containing specific directions for servicing practically every make and model of receiver on the market. As designs are modified or new models introduced we mail to every registered purchaser of the Weston Model 547 Set Tester a data sheet of useful information, thus keeping your instruction book always up-to-date. These data sheets cover the servicing requirements of each receiver as authorized by the manufacturer—based on the use of the Weston Set Tester—thus insuring correct servicing and continuous, satisfactory set performance.



**PLEASE THE
SET
OWNER**

**AND YOU
PLEASE
ALL**

WESTON ELECTRICAL
581 Frelinghuysen Ave.

INSTRUMENT CORP.,
Newark, N. J.



What YOU Have Needed!

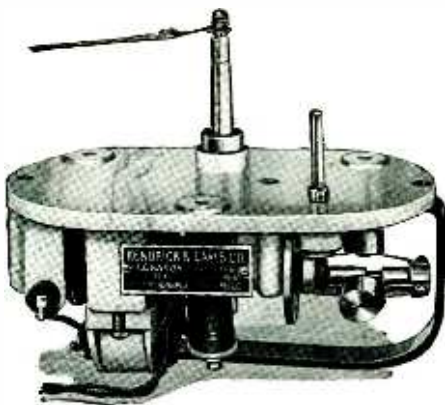
DYNAMOTONE NEEDLES


Specialty Designed for Electrical Reproduction

Entirely different from the old type of phonograph needle... different from the inside outward... from the formula up... the first needle purposely designed to cope with RADIO'S problems. To you who make, job or retail radio products... to manufacturers and technicians interested in the electro-magnetic pick-up from any angle... to exhibitors and business men concerned with sound-on-record. DYNAMOTONE NEEDLES mean Better Results through More Lifelike Reproduction of Voice and Music.

Samples and Information on Request

BRILLIANTONE Steel Needle Company of America, Inc.
 Pennsylvania Terminal Building, 7th Ave., at 30th St., New York City




 No. 120
 Universal
 Electric
 Phonograph
 Drive
 —
 A.C. or D.C.
 All Voltages
 to 220

KENDRICK & DAVIS CO., Inc., Lebanon, N. H.
 Liberal quantity discounts.

WASMUTH-GOODRICH COMPANY



Fine Radio Cabinets
fashioned by
 Master Craftsmen

103 Park Ave., New York
 Peru, Indiana

4th ANNUAL
TRADE SHOW
NUMBER
of Radio Retailing

Advertising Forms Close May 15!

JUST OUT!

Second Edition—Revised, Enlarged

A modern manual of successfully applied plans of advertising through:

- newspapers and magazines
- signs and posters
- direct mail campaigns
- sales letters and correspondence
- radio broadcast programs
- slogans, trade names, trade marks
- address labels, tags, pasters
- catalogues, booklets, folders
- foreign language advertising

The Advertising Handbook

By S. ROLAND HALL

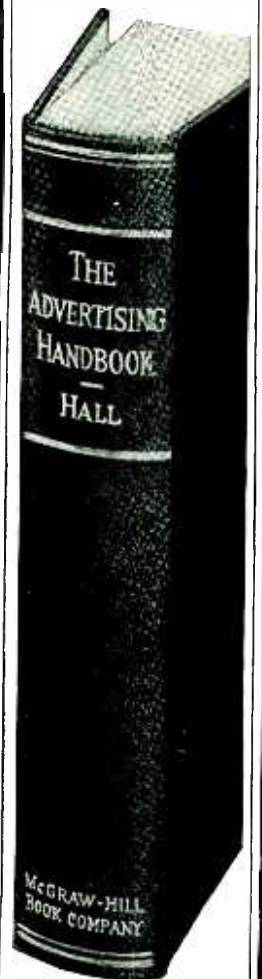
Advertising Counselor; formerly Advertising Manager, Alpha Portland Cement Co., and Victor Talking Machine Co.; formerly Director, International Correspondence Schools of Advertising Salesmanship.

HERE is a complete source of proven data for the man who buys, writes or sells advertising service. For eight years this book has been the standard work in its field. The new second edition, just off the press, has been enlarged by nearly fifty per cent. It now covers the most up-to-date methods of advertising—methods which are being used by large and small organizations everywhere. The plans advocated are those which have actually paid results.

Radio, and Other New Mediums

The new edition devotes an important section to radio broadcast programs as a method of advertising. Practical information on preparing an interesting program and making effective use of this medium are described.

Every phase of modern advertising is covered—from the initial research to writing effective copy—and from the selection of the logical field and determining the proper appeal to an intelligent analysis of results. The wide scope of this Handbook makes it immediately usable to the advertising man, the business man, the retailer and the manufacturer.



Nearly 50 Per Cent Larger Than Before

1048 pages, 5x8,
 469 illustrations
 Flexible Binding
 \$5.00 postpaid

See this book FREE—Simply mail the coupon

We will be glad to send you this book for 10 days' free examination. You will be put to no expense, nor will you obligate yourself in any way. See for yourself the value of this Handbook to your work and your business before you decide whether you will buy it.

McGraw-Hill FREE EXAMINATION COUPON

McGraw-Hill Book Co., Inc., 370 Seventh Ave., New York, N. Y.

Please send me, for 10 days' free examination, a copy of Hall's THE ADVERTISING HANDBOOK, New Second Edition, \$5.00 postpaid. I agree to remit for the book, or return it within 10 days.

Signed

Address

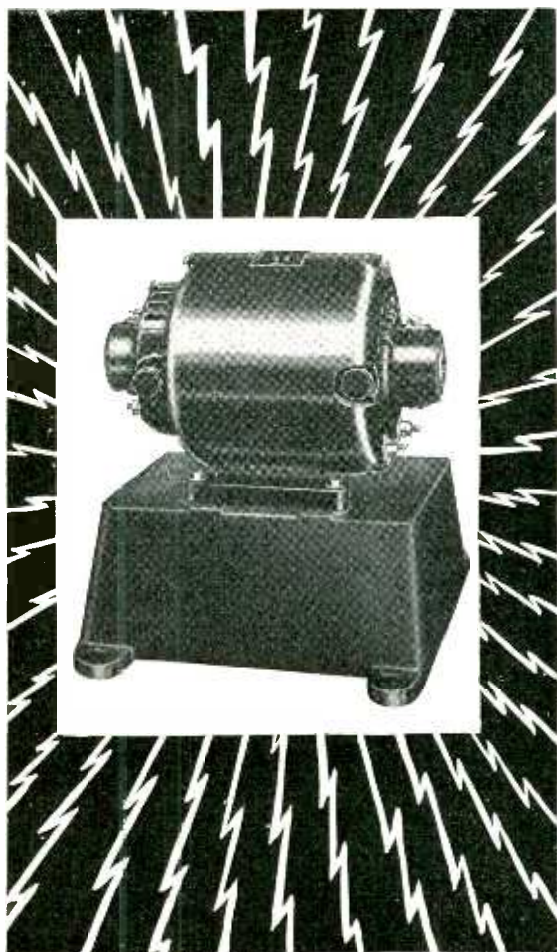
City and State

Official Position

Name of Company

(Books sent on approval to retail purchasers in the U. S. and Canada only.)

R.R. 3-30



IN EVERY D.C. DISTRICT . . .

You'll find JANETTE Rotary Converters faithfully performing their duty. What this duty is everyone in the radio industry knows . . . changing D.C. to A.C. for the operation of A.C. radio sets and electric talking machines.

The radio industry also knows the reasons for the universal acceptance of JANETTE Rotary Converters: *quietness, reliability and freedom from interference.* Available for all standard D.C. voltages, including 32 volts for farm lighting systems.

Write for Bulletin 1229-C

Janette Manufacturing Company
555 West Monroe St.
Chicago

Singer Bldg.
149 Broadway
New York

Real Estate
Trust Bldg.
Philadelphia

MAYO

FOR

SERVICE MEN

Replace with
MAYO

"They're
Guaranteed"

**COST
LESS**



Majestic Eliminator Block
Type 287

A complete line of replacement parts for standard sets.

Send for catalogue sheets.

Mayo Parts cost less, and are guaranteed.

Ask your jobber or write direct.

MAYO LABORATORIES, Inc.

281 East 137th St., New York City

OFFICES

Philadelphia, Pa.
Seattle, Wash.
Detroit, Mich.
Newark, N. J.

Minneapolis, Minn.
West Hollywood, Cal.
Waukesha, Wis.
Dallas, Texas



STOP A-C Tube Troubles at the Source

Excess voltage on the power lines ruins A.C. tubes or shortens their useful life. Many an A.C. tube gives only a few hours of useful life before it is replaced. There is an easy way to prevent damage to A.C. tubes from high voltage and voltage surges. Install a Vitrohm Unit in the wall outlet or lamp socket from which an A. C. set operates. It is certain protection against costly, frequent tube replacement.



\$2.00

**WARD LEONARD
ELECTRIC CO.**

MOUNT VERNON, N. Y.

VITROHM 507-109 • VITROHM 507-109A

For sets using 65 watts or less

For sets using more than 65 watts and less than 130 watts

SEARCHLIGHT SECTION

EMPLOYMENT and BUSINESS OPPORTUNITIES—SURPLUS STOCKS—DISCONTINUED MODELS

UNDISPLAYED—RATE PER WORD:

Positions Wanted, 8 cents a word, *minimum* \$1.25 an insertion, payable in advance.
Positions Vacant and all other classifications, 12 cents a word, *minimum* charge \$2.50.
Proposals, 40 cents a line an insertion.

INFORMATION:

Box Numbers in care of any of our offices count 10 words additional in undisplayed ads.
 Discount of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

DISPLAYED—RATE PER INCH

1 inch \$7.50
 2 to 3 inches 7.25 an inch
 4 to 7 inches 7.00 an inch
 Rates for larger spaces, or yearly rates, on request.
 An *advertising inch* is measured vertically on one column, 3 columns—30 inches—to a page. Radio Retailing

SPACE TO LET

Desirable Store, Office and Showrooms
 To let, 30 East 20th St., N. Y. City, modern elevator building, rents lower than elsewhere, centrally located. Agent on premises. Apply A. W. Levi.

I. LUIS GRASSI

Manufacturers' Representative

Buenos Aires

Diag. Saenz Peña 530

Desires to obtain representation for manufacturers or exporters of radio-telephone apparatus, accessories, supplies, etc. Excellent clientele.

REFERENCES:

The First National Bank of Boston: Commercial Intelligence Division, Bureau of Foreign and Domestic Commerce, Washington, D. C.

"RADEX seems to be the only source of authoritative information for the set owner." J. Roland Stehl, Baltimore, Md.
 "I have logged 179 stations and I am sure I would not have had half that number without RADEX." H. B. Hubbard, Elizabeth, N. J.

"I wouldn't think of trying to get a distant station I never had before without the help of my RADEX." Archie McCollister, Ambridge, Pa.

RADEX

"The DX Tuning Book"

doubles pleasure and satisfaction of a set. Many dealers even give them free with each set but they sell quickly at 25c. Automatically calibrate any set showing exact setting of dials for any frequency desired. Complete, up-to-date, authentic.

Dealers' price, \$2.00 doz., \$10.80 half-gross. Larger quantities proportionately less. Your ad can be imprinted on cover. Write TODAY!

THE RADEX PRESS

Dept. R.R., 1367 E. 6th St., Cleveland O.

KEEP POSTED ON PRICES

S. S. Jobbing House

156 W. 26th Street
 New York City, N. Y.

Without obligation add my name to your list so that I get your Radio and Electrical Merchandising Bargains regularly.

Name

Street

City State

SPECIAL NOTICE:

To the Radio Industry

Advertising in connection with legitimate offers of surplus stocks and discontinued models of radio merchandise is acceptable in this section of "Radio Retailing."

Extreme care will be exercised by the publishers to prevent the use of advertising in the Searchlight Section to encourage price cutting on current models of merchandise or equipment. Nor will advertising which invites violation of the dealer's contract with the manufacturer be acceptable.

All merchandise offered in the Searchlight Section must be accurately and fully described and must be available on order.

Kolster Buckley Speaker Table



A real sensational bargain. Genuine American Walnut speaker table with the famous Kolster 104A double magnet speaker unit built in. Great for tone and volume. Regular \$42.50 value. Special closeout price while they last only—

The height of the table is 28 inches, width 23 inches and depth 13 3/4 inches.

Single lots, each \$6.95

Lots of six. Per lot \$33.00

Terms 20% cash with order. Balance C.O.D.

This merchandise is sold subject to prior sale

BURSTEIN-APPLEBEE CO.

1408 McGee St., Kansas City, Mo.

25 CYCLE TRANSFORMERS

NOW AVAILABLE

For 60 Cycle Receivers without any change in the design of your Receiver.

Send us your specifications and get in on the 25 Cycle business.

They're Smaller, Perfect Regulation and

Made in a 25 Cycle City.

DYMAC RADIO

2169 Bailey Ave., Buffalo, N. Y.

Polymet Hi Volt 1 Mfd. Filter Condenser 35c each \$3.60 per Doz.

Polymet Hi Volt .1 Tubular By-Pass Condenser \$1.00 per Doz.

Pacent Phonovox De Luxe Pick-up list \$15.00, our price \$4.95

750 ohm Wire Wound Grid Suppressors \$1.00 per doz.

Bal. Rad. Hy. Voltage Uncased Surge Proof Condensers.

1/2 mfd. 300 V 25c.
 1 mfd. 600 V 30c.
 2 mfd. 600 V 40c.
 4 mfd. 600 V 60c.

Elkon M 16 Replacement Rectifier (without base) list \$6.00, our price \$2.35

Genuine Freshman Output Transformers 1-1 30c each.

Send for 16 page Radio Bargain Bulletin. No obligation of course

BALTIMORE RADIO CO.

47 Murray St., New York City, N. Y.

A. C. TUBES

All tubes guaranteed—full replacement within 10 days. Manufacturing close out.

UX 226

UY 227

UX 280

UX 171 A

35c EACH

20% with Order. Balance C.O.D. Lots of 50.

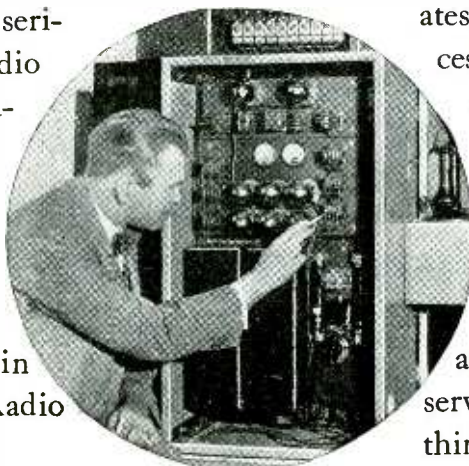
RELIABLE RADIO CO.

46 Brattle St., Boston, Mass.

RADIO NEEDS YOU

Let RCA Institutes show you the way to SUCCESS in this fast-growing industry

REACH out for a big-pay job in Radio... Tie-up to the fastest-growing industry in the world today... See for yourself what other men have done... You, too, can do the same! Hundreds of fellows just like you are now earning from \$2,000 to \$25,000 a year in RADIO. J.H. Barron, Radio Inspector of the U. S. Department of Commerce says that a most serious shortage in trained Radio men exists right now. Thousands of trained men are needed. Broadcasting stations, manufacturing plants, retail and wholesale dealers, as well as ships at sea and planes in the air, require trained Radio men.



very source of radio achievement... the vast world-wide organization that has made Radio what it is today... that sponsors every lesson in this course.

RCA Graduates Find it Easy to Fill Good Radio Jobs

There has been a radio job for practically every graduate of RCA Institutes. Graduates are actually *Trained* for Success because they learn radio by actual experience with the RCA Institutes famous outlay of apparatus given to every student of this course. You learn to solve every radio problem such as repairing, installing, and servicing fine sets. Here is everything you need know in order to fill a well-paid position in Radio.

*Learn Radio at Home...
RCA Institutes Will Train
You for Success!*

Radio Mechanics earn
up to \$4,800 a year.

*Send for this Free Book
"Radio... the Field of
Unlimited Opportunity"*

RCA sets the standards for the entire radio industry. The RCA Institutes Home Laboratory Training Course gives you the real, inside, practical training in Radio, quicker than you could obtain it in any other way. It's easy to learn at home in your spare time. You get your lessons and criticisms direct from RCA... the

Read these 40 fascinating pages, each one packed with pictures and text that tell you everything you want to know about the many brilliant opportunities in Radio and about RCA Institutes, the world's oldest and largest radio training organization. Tune in on Radio. Send for this free book today and speed up your earning capacity!

Clip this Coupon NOW!

RCA INSTITUTES, INC.

Formerly
Radio Institute of
America



RCA INSTITUTES, Inc.
Dept. RT-3, 70 Varick St., New York

Gentlemen: Please send me your FREE 40-page book which illustrates the brilliant opportunities in Radio and describes your laboratory-method of instruction at home!

Name

Address



MODEL 724

ANNOUNCING

THE NEW 1931
TRIPLE SCREEN GRID



Built Around Years of Experience in the Manufacture of High Grade Radio Receivers

Marvelous Appearance—Sensational Performance

In construction, appearance, performance and value, we believe this new 1931 triple screen grid Pierce-Airo outclasses the field. You can easily prove this to your own satisfaction, for we shall be glad to send you

a sample Pierce-Airo Chassis for test in your own place.

Write or wire us today. We will also send you complete specifications of the chassis and full particulars regarding the Pierce-Airo proposition.

PIERCE-AIRO, Inc., 113R Fourth Ave., New York City

ALPHABETICAL INDEX TO ADVERTISEMENTS

Page	Page	Page
Aluminum Co. of America..... 63	Janette Mfg. Co..... 113	Thordarsan Elec. Mfg. Co..... 106
American Weekly..... 76	Jewell Elec. Instr. Co..... 75	Transformer Corp..... 78
Andrea, F. A. D..... 97	Kato Eng. Co..... 111	Triad Mfg. Co..... 85
Arceturus Radio Co..... 83	Kendrick & Davis..... 112	United Reproducers Corp..... 91
Associated Factory Distr..... 86	Kennedy, Inc., Colin B..... 105	United States Radio & Television Corp..... 7
Atwater Kent Mfg. Co..... 82	Ken-Rad Corp., Inc..... 79	Utah Radio Prod. Co..... 3
Audak Co..... 89	Kiel Furniture Co..... 4	
	Leutz, Inc., C. R..... 13	Ward Leonard Elec. Co..... 113
Bakelite Corp..... 99	Mayo Lab's..... 113	Wasmuth-Goodrich Co..... 112
Brilliantone Steel Needle Co..... 112	McGraw-Hill Book Co..... 110, 112	Webster Elec. Co..... 90
Browning-Drake Corp..... 81	National Carbon Co..... 94	Weston Elec. Instrument Co..... 111
Brunswick-Balke-Collender Co. Inside Front Cover	National Carbon Co., Raytheon Div..... 12-109	Williams Oil-O-Matic H't'g Corp..... 59
Bud Radio, Inc..... 88	Norden-Hauck, Inc..... 108-109	Wirt Co..... 104
	Pacent Elec. Co..... 96	Zenith Radio Corp..... 103
Cable Radio Tube Corp..... 74	Perryman Elec. Co..... 11	
Capehart Corp., The..... 8-9	Pierce Airo, Inc..... 116	
CeCo Mfg. Co..... 64	Radio Corp. of America, 65-66-67-68-69-70-71-72, Back Cover	SEARCHLIGHT SECTION
Central Radio Lab..... 108	Radio Mfrs., Trade Show..... 102	Classified Advertising
Cornish Wire Co..... 110-111	Radio Record Pub. Co..... 101	BOOKS
Crosley Radio Corp..... 95	Readrite Meter Works..... 106	Radex Press..... 114
	Sampson Industries, Inc..... 6	EDUCATIONAL
DeForest Radio Co..... 77	Samson Electric Co..... 93	R. C. A. Institute, Inc..... 115
	Sentinel Mfg. Co..... 84	MISCELLANEOUS..... 114
Edison Co., Inc., Thos. A..... 88	Silver-Marshall, Inc..... 100	REPRESENTATIVES WANTED..... 114
	Sleeper Research Corp..... 62	RADIO STOCKS
Flexlume Corp..... 104	Sparks-Withington Co..... 10	Baltimore Radio Co..... 114
	Sprague Spec. Co..... 80	Burstein Applebee Co..... 114
General Elec. Co..... 60-61	Stewart-Warner Radio Corp..... 14-15	Dymac Radio..... 114
Gold Seal Elec. Co., Inc..... 73	Stromberg-Carlson Tel. Mfg. Co..... 2	Reliable Radio Co..... 114
Graybar Elec. Co..... 98	Summerill Tubing Co..... 111	S.S. Jobbing House..... 114
Grebe & Co., Inc., A. H..... 5	Sylvania Prod. Co..... 16	
Grigsby-Grunow Co..... 92		
Gulbransen Co..... Inside Back Cover		
Hammond Clock Co..... 5		
Hygrade Lamp Co..... 87		
International Resistance Co..... 110		

Announcing - - -

THE NEW GULBRANSEN



\$99.50
LESS
TUBES

PRECISION-BUILT RADIO

More real radio value is packed away into this receiver than you ever believed possible at so low a price. Nine tubes—screen grid power detection—4 gang condensers—245 push pull—full ten-inch dynamic speaker—local-distance switch—a cabinet of rare beauty.

GULBRANSEN'S 1930 PROGRAM

—calls for a price range—an advertising and merchandising program—an embodiment of the latest engineering features—and cabinets of unusual eye-appeal. No dealer or jobber can afford to make a 1930 connection without first learning what Gulbransen has to offer. Write at once to

GULBRANSEN COMPANY

3232 W. Chicago Ave.
Chicago

EDW C RIPPEL
1522 EAST ST
HONESDALE PA

...More Cash in the Bank!



Display the red and black carton and the famous RCA trademark

SELL RCA RADIOTRONS

Tube business is good for RCA Radiotron dealers. Bigger and bigger repeat business can easily be yours!

RCA Radiotrons are easier to sell because they are *recognized* as the standard of the industry. Day after day their quality and uniformity are piling up *customer satisfaction*.

Why risk your prestige...and *profits*... by selling inferior tubes?

Concentrate on RCA Radiotrons... and get *all* the profits!

RCA RADIOTRON COMPANY, INC.
Harrison, N. J.

RCA Radiotron

THE HEART OF YOUR RADIO SET